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Notes and Items.

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"I know. It is your bill that pains me."

OAKLAND HEIGHTS SANATARIUM,
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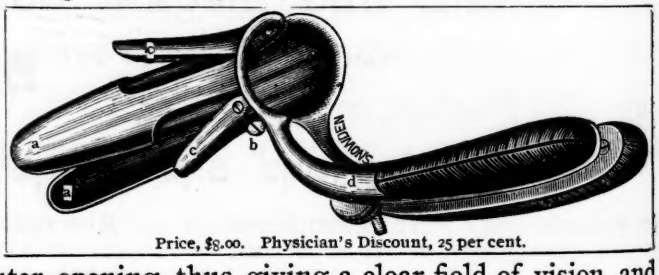
Electro Therapeutist.

A NEW ANO-RECTAL SPECULUM.

BY ROBERT W. MARTIN, M. D., PHILADELPHIA.
(*The Times and Register, October 5, 1889.*)



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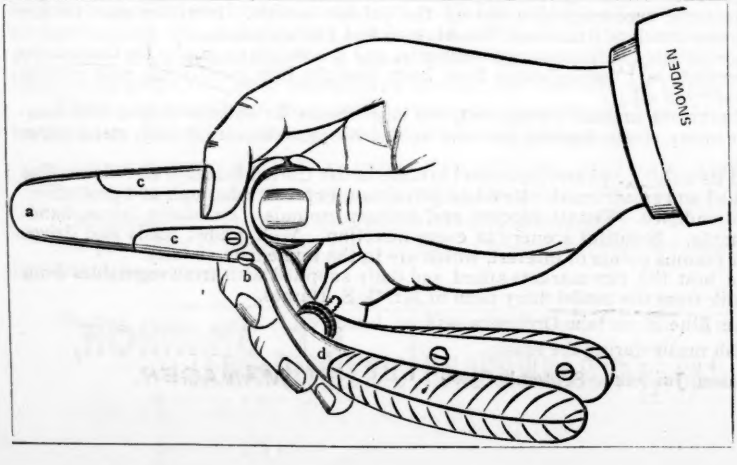

The Times and Register.

Vol. XXII, No. 22. NEW YORK AND PHILADELPHIA, MAY 30, 1891. Whole No. 664.

Original Articles.

PROF. KOCH'S CURE OF TUBERCULOSIS AND SCIENTIFIC THERAPEUTICS.

BY M. SEMMOLA, M.D.,

Professor in the Royal University of Naples; Head Physician in the Hospitals; Senator of the Kingdom of Italy, etc.

(Translated by REV. T. D. MALAN, D.D.)

IN the midst of the universal enthusiasm concerning the alleged discovery made by the famous bacteriologist of Berlin, Prof. Semmola expressed frankly his skepticism as to the possibility of Koch's lymph being a remedy against tuberculosis. His opinion is based upon scientific data and clinical experiment.

Semmola has now been thirty-five years closely engaged in special studies of clinical therapeutics, in search of a possible reconciliation between the researches of the laboratory and their application to clinical therapeutics. His rigorously-scientific deductions have made it impossible for him to share in the universal enthusiasm for his esteemed friend's (Koch) discovery.

Having been requested by the editor of the *Deutsche Revue*, Dr. Semmola made public his scientific arguments on the subject in the well-known Italian medical periodical, *Il Progresso Medico*, which is published in Naples thrice a month.

The starting-point of Pasteur's anti-rabic virus and of Koch's lymph was an erroneous one, and could only lead to erroneous consequences. They, and other scientists, got their inspiration from the fundamental notion that the Jennerian vaccination was an admirable instance of immunity against small-pox, owing to the inoculation of vaccinic virus, which, in their estimation, was a small-pox virus attenuated by passing through the organism of the ox.

This instance, however, has nothing in common with the artificially-produced vaccines of Pasteur and Co.; nay, they are two altogether different things. Moreover, it has not even been proved that Jenner's vaccine was an attenuated small pox virus. Such a question ought to have been scientifically solved before any deduction could be drawn for its comparison and application in other spheres.

Semmola acknowledges that it is not a matter of small consequence to obtain an attenuated *virus* through another animal species, or through physical or chemical means; but to attenuate a virus by passing it through a living organism is one thing, and to attenuate it through oxygen or heat is another. Further, this is not the only philosophical and experimental error; there is another one of no less consequence: Jenner's vaccine, which, rigorously speaking, is still an *incognito*, is inoculated into a healthy man, in order to render his organism refractory to small-pox; or, in other words, to constitute his organism into a sterile ground of culture for the microbic invasion of small-pox—which has not taken place yet, up to date. But this kind of immunity has nothing to do with the immunity which Pasteur, Koch, and others have endeavored to create in a diseased organism, like one bitten by a rabid dog, or already affected with pulmonary tuberculosis. When there is already a virus in the organism, the clinico-biological conditions of that organism are being modified day by day, hour by hour, and even minute by minute, through the evolution that is to lead it to a degree of alteration such as to develop in due time hydrophobia, or any other disease represented by the absorbed virus.

Semmola mentions Pasteur, not because Koch's lymph is an attenuated virus whose inoculation resembles the anti-rabic method, but because there is no room for doubt that Pasteur's labors have prepared the way for Koch's researches.

Now, Koch's lymph has, in the eyes of the true physician, the same sin of origin as all the applica-

tions that are inconsiderately carried from the laboratory into the clinic.

Here Semmola shows the weakness of Koch's starting-point concerning the specific action of his lymph on tuberculosis, which action is still an open question for discussion. Semmola admits that the ymph may prevent the formation of new tubercles, but denies the possibility of its curing the alterations already produced in the organism by years of indwelling tuberculosis. Koch's lymph does not kill the bacilli, whilst, on the other hand, it is not proved whether tuberculosis has even a bacillary origin.

In one word, to cure tuberculosis you must either kill the bacillus tubercularis, or make the organism into a sterile ground for its action; and Koch's lymph cannot produce either of such effects.

That the lymph does not kill the bacilli has been acknowledged by Koch himself. As to its effects upon the organism, it has been proved by experimental pharmacology and clinical therapeutics that the lymph cannot produce any beneficial modification upon it, such as to render it incapable of sheltering the bacillus tubercularis. Such an action can only, and slowly, be produced by prolonged hygienical influences, or by *pharmacii* of mineral origin, like mercury, iodine, etc., in syphilis, scrofula, etc., and in such doses as not to produce any poisoning phenomena. Such a therapeutic action cannot be produced by *pharmacii* of an organic nature, and least of all by alkaloids, which, instead of acting primarily on the activities of nutrition, reach the histologic, muscular, nervous, or glandular elements, provoking immediate disorders in their functions, and producing poisoning phenomena irreconcilable with health and life.

However mysterious the process of Koch's lymph preparation may have been kept thus far, one fact at least is known through analysis, *i. e.*, that the lymph does not contain metallic salts, and that, considering its phenomenal poisoning (toxic) power, it must contain some ptomaine or toxalbumin, *i. e.*, one of those principles formed under the influence of the microbes, which have of late opened such a new and splendid horizon toward the solution of pathological problems. From this standpoint Dr. Semmola renders homage to the great Berlin bacteriologist for his discovery of a new toxic principle, superior in power to all those actually known previously. On this question Dr. Semmola calls the attention of his readers to the fact that it was an Italian chemist—Prof. Selmi—who inaugurated the discovery of the ptomaines.

The biological action of the ptomaines or toxalbumins can only enter the category of the biological actions of the alkaloids, or of the glucosides, or of other organical *acri*, *i. e.*, its action is not noticeable if administered in homœopathic doses, and it is toxic and deadly if given in larger doses.

Now, all the organic principles inoculated into a living organism are eliminated more or less rapidly through the kidneys without leaving any effect after a few days, and, at the present hour, many facts have already substantiated this opinion.

As early as the 25th of November, 1890, Dr. Semmola had concluded one of his articles on the subject in the following words:

"Although I do not hope that it will ever happen, it would, however, be the happiest day of my medical life in which I were able to modify my present conviction through the positive demonstration of clinical facts. Then, also, I should be happy to proclaim Robert Koch a second Jenner. For the present (November, 1890) I only admire in him the great naturalist, and the most eminent bacteriologist of the day. I cordially wish that Providence may allow the immutable laws of experimental methods and scientific logic to be found in the wrong—at least for this once, and for the sake of the redemption of so large a fraction of mankind."[1]

Koch's lymph is a powerful organic poison, unable, however, to either kill the bacilli or to modify the organism so as to render it proof against the bacilli. There seems, however, to be a contradiction between Semmola's negative clinical results and Koch's preliminary experiments upon guinea-pigs. But Koch's laboratory experiments have not proved successful against tuberculosis in clinics and hospitals. The reason of it is that in guinea-pigs the inoculation of the lymph preceded, or followed very closely after, that of the bacilli, so that when these were introduced into the living organism, they at once met the action of the lymph, or could only produce an artificial tuberculosis in a sound organism, no doubt easily cured by the action of the lymph. But from such an apparent cure to the cure of real and inveterate tuberculosis lies a chasm which no laboratory could span.

The Gordian knot of the question consists in pretending to apply to a living organism affected by real tuberculosis the results of mere laboratory experiments, as though the conditions were not altogether different. The bioclinical bases being different, the results cannot be identical. Therefore Dr. Semmola not only denies the curative power of Koch's lymph, but he goes further, and declares impossible any curative discovery upon such principles and methods.

Dr. Semmola then touches upon the "Dangers which may arise from the use of Koch's Lymph." As aforesaid, the lymph does not kill the bacilli, nor modify the organism so as to make it refractory to the action of the bacilli. But there is more; the lymph produces in the organism such effects as to constitute a new and acute, though artificial, disease; which, however short, is not void of danger, and the more real since the biological effects of the lymph are as yet an *incognito*. In some cases it has been impossible to prevent paralysis of the heart, and death. Now, no physician has a right to play with the life of a patient, even under the pretext of experimenting a new remedy, which, in the present case, is a secret remedy of a certainly poisonous nature, and of a dubious curative effect. The well-deserved fame of the great naturalist and his long years of earnest labors cannot constitute an absolute proof in favor of the supposed remedy.

Dr. Semmola concludes by saying that when he shall have seen one case of real cure of real tuberculosis then he will applaud heartily, and make a great *peccavi* for his present skepticism. He also challenges all the eminent Italian and foreign physicians and scientists to make known the real results of their experiments.

As to the lupus cure, Dr. Semmola, not being a surgeon, declares himself to be incompetent. Still, the lupus having nothing to do with tuberculosis, and thus far no real cure having been affected, Bergmann himself has had to attend again one of his patients who had already been discharged as cured.

Finally, as to the importance of Koch's lymph considered as a diagnostic means, Semmola declares it to be a failure also, and in two ways:

[1] *Corriere di Napoli*, 25–26 November, 1890.

(*a*) Because in chirurgical and pulmonary tuberculosis the diagnosis is but too easy and clear.

(*b*) Because when the diagnosis is difficult or doubtful, so much the better for the supposed patient, and there is no need of exposing him to the dangerous effects of the lymph for the unprofitable comfort of knowing for a certainty that he is affected with tuberculosis, whose effects might even be accelerated by the action of the lymph, and without the hope of a cure.

Moreover, in doubtful cases there are other and less dangerous means of diagnosis. Furthermore, even as to the diagnostic power of the lymph it is now very much doubted, and even denied, by the experiments of distinguished physicians upon real tuberculosis, in which no reaction was produced, whilst on the other hand the reaction was produced in perfectly sound organisms not affected with tuberculosis.

Koch ought to have matured his observations longer and better before making the communication he made on November 13, 1890, to the Medical Society of Berlin. It might have led to some real good for humanity and advantage of science.

A BRIEF REFUTATION OF SOME STATEMENTS CONTAINED IN AN ARTICLE ENTITLED: "A REVIEW OF THE TREATMENT OF VARICOCELE."[1]

By MORRIS H. HENRY, M.D., LL. D.,
NEW YORK.

THE interest that I have taken and felt on the subject of varicocele—its etiology and treatment—led me to read carefully the extraordinary production under the above title contributed by a Dr. Frank Lydston, of Chicago. It covers nearly nineteen columns of valuable space. It may fairly be termed an exhausting article.

I desire only space enough to correct the false statements connected with his version of my own achievements and contribution on this subject, followed by two additional paragraphs conveying my impressions of the article in its entirety.

He says: "Resection of the scrotum is the safest operation for varicocele, and according to Henry, is a radical cure in the true sense of the term. He reported fifty-nine operations some years ago, which, as far as he could learn, were radically successful. This same operator has since reported a number of cases at various times, for which he claims an equal degree of success. In my early experience with Henry's operation, I was inclined to accept the statements of the ardent advocate of the method without much question. A wider experience and observation has, however, convinced me that too much has been claimed for the operation. To be sure, as Henry naïvely says, it makes little difference if the operation is again necessary, after a lapse of years, as the method is perfectly safe, but this is begging the question in regard to an alleged 'radical cure.'

"In very large varicoceles the changes in the texture of the various walls are such that pressure and support alone are insufficient to secure restoration of their natural consistency and caliber, even though the pressure be sufficiently firm and continuous. There is little elasticity in the remaining portion of the scrotum, and the tone of the part is apt to remain as impaired as before the operation, the same constitutional conditions prevailing. It is my opinion that stretching and relaxation of the new 'natural suspensory' or scrotum will occur in the majority of severe cases sooner or later. The varicocele may not be as severe as before the operation, and the more urgent symptoms may be relieved; but there is nothing edifying in the spectacle of a good-sized varix a few years, or, perhaps, a few months, after a so-called radical cure. I desire to do the method full justice, however, and am free to say that the subjective symptoms do not always recur *pari passu* with a return of the varix; but I am discussing a 'radical cure,' and hair-splitting is unnecessary."

In connection with this statement the author gives an illustration: Fig. V, of my original instrument, which he terms: "Henry's Improved Scrotal Clamp." He cites as his authority for all this stuff in a foot note: "M. K. Henry, Treatment of Varicocele. J. H. Vail & Co., 1871."

An honest regard for the patience of my readers leads me to forbear any further quotations. A complete refutation of the absurdities and falsehoods contained in the above citation will, I trust, be sufficient, to cast discredit on the entire article. I shall have a few words to say, further on, on the subject of instruments, of which he gives illustrations. I will indulge in no "hair-splitting" and do no "begging the question." I have never resorted to any such methods, and surely, in this contribution, there is neither necessity nor temptation for any such indulgence.

I did not answer or pay any heed to the brochure of M. Edmond Wickham, as he is scarcely more than the recorder of the practice of M. Horteloup, and his entire article and operations were based on my reports—every one of which he quotes—to a limited extent, and his publication did not appear until 1885. It must be patent to any one versed in the literature of, and capable of an understanding of the *modus operandi* of the operation and its results, whence Wickham and Horteloup derived their inspirations. Dr. Lydston claims to have operated in forty cases of varicocele, sixteen of which were by "simple resection of the scrotum." He says: "A recital of these cases in detail would be monotonous, as well as wasteful of valuable space." I agree with him perfectly on this one point. To the charge of being naïve, I will not plead; let the reader judge.

I did not publish any pamphlet in 1871. Mr. Vail was at that time, and for some years after that date, in the service of other parties.

I have never uttered a word nor said anything, in any of my contributions, that could, by any chance, be construed by any person of sound mind, nor lead to the impression, that "it makes little difference if the operation is again necessary, after a lapse of years, as the method is perfectly safe." The instrument, of which he gives an illustration as my "improved scrotal clamp," I discarded more than fifteen years ago. My improved instrument is entirely different, and possesses many advantages over the one he alludes to. Keyes, in his revised edition of Van Buren, on venereal diseases, in speaking of ablation of the scrotum, mentions only one. He says: "The clamp of Henry, of New York, is an admirable one." This compliment reconciles me to the condemnation of Dr. Frank Lydston, of Chicago, who regards it as "bunglesome." In further answer to Dr. Lydston, I extract the following paragraphs from an article entitled, "The radical cure of varicocele attended with redundancy of scrotum demonstrated by time." It was published in the Journal of the American Medical Association, at Chicago, November 10, 1888:

[1] The paper referred to was read before the Southern Surgical and Gynecological Association, and printed from advanced sheets of their transactions in THE TIMES AND REGISTER, May 2, 1891.

My own first practical knowledge of the operation —over thirty years ago, and while yet an undergraduate—was in being accidentally asked to assist the late distinguished and erratic Edward H. Dixon, an alumnus of the College of Physicians and Surgeons, of New York, who performed the operation on a young lawyer. That operation was not a success. The failure was due to the method of operation, and the method was faulty owing to the want of proper instruments for the performance. But to Dixon must be accorded the credit of first calling attention to the operation in this country. I am fully sustained in this view by the testimony of the oldest member of the firm of Tiemann & Co., the celebrated instrument makers; the origin of the firm antedating the period of Sir Astley Cooper's first publication on this subject. I have examined patterns of all the instruments they have made, and heard of the many embryonic efforts of others that never fulfilled a period of gestation. Dixon's instrument consisted of two curved steel bars about four inches in length and a quarter of an inch in thickness, perforated at each end for the introduction of screws to hold the bars together when embracing the tissues to be removed. It was a failure. Many attempts have been made by others, within the past few years, to revive this same instrument on account of its cheapness, and the ulterior purpose of associating their names with the operation. Their efforts and so-called "modifications"—a term of license to take unpardonable liberties with other men's inventions—have attracted little or no attention.

My first studies of the nature and best means for the relief of varicocele commenced in 1857. I first published the results of my experience and observations in 1871, in *The American Journal of Syphilography and Dermatology*. I gave a detailed account of my method of operating; illustrations of my instruments; the *rationale* of the operation and the results. While my report met with unusual and not unfavorable attention, it was still urged that obliteration of the veins alone afforded a radical cure. The phantasm of dangerous hemorrhage attending the operation was dispelled on examination of my instruments and method of operating, but "fear of lasting benefit" still remained. Gross, Agnew, Ashurst, Barton, Levis, Hammond, Hutchinson, Van Buren, Keyes, Bumstead, Taylor, Otis, Bangs, Weir, Bull, Abbe, and McBurney have publicly attested their appreciation of my instruments and method. Still, further time was asked ere a verdict should be rendered in accordance with my appeal. I waited eleven years, until 1881. I then told, before the New York Academy of Medicine and the Academy of Surgery, of Philadelphia, of my experiences. This account was published in *The Medical Record*, May 28, 1881, and subsequently in pamphlet form. In my account of fifteen cases recorded up to that time I had met with uniform success. Is any further evidence essential to demonstrate that there is a limit to the elasticity of the scrotum; or the resiliency of the coats of the veins under favoring circumstances; or a lessening of the enlargement under a decrease of force and shortening of the column of blood of the spermatic vessels?

I have performed the operation fifty nine times. In four instances hydrocele existed as a complication. They have all made radical cures as far as I can learn. I have made more than ordinary efforts to obtain information of the results up to this period. Surely cases operated upon ten or more years ago, showing now no more existence of former varicoceles, are a refutation of the objection to complete excision of the redundant scrotum for the permanent relief and cure of varicocele.

Written communications from distinguished *confrères* tell me: "I think you have rendered a real service to surgical science by your labors in the direction to which it refers.—WILLIAM A. HAMMOND."

"I have operated very many times, and the operation grows in favor in my estimation. The results are excellent, and always satisfactory to the patients. —R. J. LEVIS."

"I hope you will succeed in impressing the members of the Academy with the superiority of your method of operation. I am satisfied, after having tried various methods, that this one is by far the best. —J. C. HUTCHISON."

"The operation of excision of a portion of the scrotum which practically makes a close suspensory bandage is more nearly radical than the operation of tying, or otherwise attempting to obliterate the veins.—FRANK H. HAMILTON."

I could add largely of extracts from other medical correspondents and patients, affording additional evidence in support of all that I have claimed for the operation I advocate in the treatment of varicocele. Is it necessary?

DELUSIONAL INSANITY; PROBABLY DUE TO JABORANDI.

BY WILLIAM F. WAUGH, M.D.

A CASE recently coming into my hands illustrates the peculiar difficulty occasionally experienced in attending a patient over whom one has not perfect control. The patient, a compositor in the office of an esteemed contemporary, wound up a protracted debauch by getting very completely thrashed; his eyes blacked, head beaten, etc. He was put in good order, told to keep quiet in bed, in a cool and dark room, with low diet; and warned of the dangers of infraction of these directions. He obeyed nicely, except that he went out two days later, got drunker than ever, and a beating that exceeded the first. Erysipelas then set in furiously, with high fever, spreading rapidly from a wound in the scalp that laid bare the skull. Fearing that through this route the disease might penetrate to the brain, as occurred once before, the patient was put upon fluid extract of jaborandi, half drachm doses every two hours. Profuse perspiration ensued, but even larger doses were required to keep the disease in check. The heart's action, however, warranted the exhibition of these doses, and the erysipelas was soon shorn of its strength. But whether as a result of the alcohol (that had been used to an extent justifying a delirium tremens), or from the effects of the jaborandi, as the fever subsided the man became delirious. He believed that his wife had carried him off to the police station, half clothed, and subjected him to such indignities that he could hardly be restrained from flying at her. None of the typical symptoms of alcoholic delirium were present. He drank buttermilk freely for two days, and then ate heartily, without any gastric distress. Hydrobromate of hyosceine and the neutral elixir of opium, given in turn, failed to have any effect on the delirium. The jaborandi was stopped and moderate doses of bromides given; when the delusions gradually subsided.

From my experience in a former case, and from an observation made by a Russian physician, I am of the opinion that the delusional mania was due to the jaborandi; and that such an effect may be looked for

when this drug is given in large doses for some time. Nevertheless, in views of the extreme danger of erysipelas occurring under such circumstances as are described above, I would unhesitatingly push the use of the drug, as a lesser evil.

1725 ARCH STREET, PHILADELPHIA.

THE WEST INDIES AS A SANITARIUM.

By WILLIAM F. HUTCHINSON, M.D.

CHAPTER XIII.

BERMUDA.

IT is not my intention to enter into any extended description of this familiar winter resort, because my personal knowledge of it is derived from two visits only, both made several years since. I had hoped that this chapter would have been written by General Hastings, whose long residence in Bermuda, and whose literary attainments furnish an ample equipment for the small task; but an unfortunate attack of grippe prostrated him just when delay in going to press was out of the question, and I must therefore write from such data of my own, and from other sources as are at hand. There is but a single route to Bermuda from the United States, and no need of any other, as long as the comfortable steamers of the Quebec line ply as regularly as at present. The Trinidad and Orinoco are excellent sea boats, safe and staunch. Their officers are experienced seamen, and the passage is short, only fifty-five or sixty hours. I wish that I could speak favorably of the beauty of winter sailing on the North Atlantic, but facts are stubborn, and the average passage is a rough one. Perhaps some of the numerous remedies for sea sickness may alleviate it, but a majority of Bermuda passengers spend a large part of the trip in bed, and vacant seats at table are numerous.

Fares are low, $50 the round trip; one has choice of two excellent hotels, kept by Americans, at home rates, or may lodge in comfortable quarters in private houses, at from $10 to $14 a week.

Society is good, and for those who are fond of aquatic sports, the Bermuda yachts offer continual pleasure. From the entirely equable nature of the climate, one may arrange ahead for any of the small excursions available, and be sure of having fine weather.

To one whose first visit to warm countries in exchange for a northern winter is made to Bermuda, there is always the delightful fascination of leaving behind a nightmare of cold and wet and dire discomfort and coming to cheery sunshine, open air, leaves and flowers that bloom always, serene delight of tepid temperature and the songs of birds that sing every day, and the sense of health which springs afresh each morning that one remains in the enchanted land.

Perhaps one is disappointed, if an old traveler, in the lack of luxuriant tropical vegetation he expected; but when he recalls that he is only hours from New York in place of weeks, there is reason. Coming into port at Hamilton, there are glittering cottages and houses against a sombre background with small elevation, and none of the palm guarded hills of islands farther south; but once the reef is crossed, inner waters assume such varied tints of transparent blue and emerald green, with many tinted coral shining through, and fishes of rainbow hues darting about, that there is no longer doubt of arrival in the tropics, and each sense is busily occupied in enjoyment of the novel picture. Ashore there is a general impression that time is on the free list, every one has so much of it, and appears to be at a loss what to do with so useless a commodity. Even so small a matter as mooring the steamer to the dock is only accomplished by hours of labor, if any one can be said to labor in Bermuda, and the only real work I saw done there was heavy looking on.

Temperature is comfortable. One is released from fires and winter wraps, except upon rare occasions in morning and evening. But these exceptions are enough to make the rule good that flannels should always be worn next the skin, and woolen outer garments retained. It is better to feel oppressed a little by clothing than by a doctor's bill, and I have seen mornings and evenings in Bermuda when a light overcoat was comfortable.

There are two large hotels, conducted upon the American plan and charging American prices, some twenty boarding-houses where rates are from $10 to $25 a week, and a few pleasant rooms with private families, where the average visitor may be especially comfortable without the need for such continuous dressing as is the style at the hotels. For Bermuda is becoming a feeble imitation of Saratoga; and the people one sees on the verandahs of the Hamilton or in fashionable nudity at its balls or dinner parties, are of the same class that crowds the States or Congress Halls in August and makes merry in hours that should be devoted to rest.

The little islands are coming to have an atmosphere of dissipation and fashion about them that is as welcome to hotel managers as it is distasteful to those who seek rest, moderate prices and comfort in their winter resorts, and experiences of the past winter go to show that lovers of nature and nature's quiet must go farther than Bermuda to find what they seek.

But it is no part of our purpose to criticise invidiously; and from the number that went to Bermuda this last season, it is plain that it is becoming popular and will divert a share of American travelers from Florida.

The climate is certainly not warm enough for those who are prescribed heat as a cure—as, for example, in diabetes or albuminuria. There has been a minimum temperature of 50° F. each winter month for several years, and a daily variation of from 11° to 18°. Now, while this is so vast an improvement over the average weather of the United Stares, North or South, as to be incomprehensible to those who have never been across the Gulf stream in winter, it does not compare with the steadiness of Nassau, where I have passed sixty days with a total daily variation of 6° from a standard of 70° F., or with the Windward Islands, where there is a total yearly variation of 12° from 80° F.

As a sanitarium, then, Bermuda must be ranked below her sister islands farther south; but as a semi-tropical winter resort for the wealthy it may fairly claim first place.

Wheelmen will find perfect roads and small elevations, constant delight in their machines; and one of them just returned told me that the whole island was like a floor and cycling was at its very best. Delightful journeys may be made to the Natural Arch at Tucker's Town, along the north shore to Pulpit Rock or to see the royal palms at Pembroke Hall, meeting cordial welcome everywhere.

There is no better sailing, better skippers, nor better boats anywhere than Bermuda yachts, and for those who enjoy aquatic sports, every day is pleasant. One needs be a bit of a sailor to feel quite safe in such slight boats so strongly sailed, but accidents worse than spray duckings are almost unknown.

It is essentially a military station, and for those who care for soldiers and their evolutions, there is plenty to do. At the barracks there are always two or three regiments, whose officers are pleasant, jolly chaps, ready for any kind of frolic, and whose drills, guard-mounts, etc., are revelations of discipline to American visitors, whose female contingent never tires of watching their manœuvres afield and never fails to capture as many of them as possible to adorn their little dinner parties and dances afterwards.

Take it all in all, Hamilton and the rest of Bermuda will scarcely demand a longer notice than this, unless from the pen of some one far more familiar with it than I; and once more I have to regret the illness of General Hastings for my reader's sake.

THE INTERNAL USE OF THE SIMPLE ASTRINGENTS.—Pure astringents are agents which cause contractions of the living tissues, especially the circulatory channels, and have no appreciable effect on the action of the heart.

All, of course, will admit that this definition is correct, and that it represents the effect normally produced by their exhibition. So we will proceed to look a little more closely at their action on the blood-supply and their therapeutics when exhibited internally.

The heart, as we know, under ordinary circumstances and normal conditions, contracts from seventy to eighty times each minute, each contraction completely emptying the ventricles. The capacity of the left ventricle being about five ounces, then in each minute there passes into the aorta and consequently through the whole systemic and pulmonary circulations from 350 to 400 ounces of blood. Now, it is evident that without change either in the frequency of the heart's contractions, or its capacity, the same amount of blood will, of necessity, be forced into the aorta and through the whole body—no matter what may be the size of the aorta or smaller vessels—in the same length of time.

On the administration of a substance which causes general constriction of the vessels without changing the amount of blood forced into them, the intravascular tension must be increased, and consequently the rapidity of the current, proportionate with the constriction. So that any vessel or series of vessels being selected for examination, it will be found that just as much blood passed through them in the same time, as passed through them before such administration.

Hence, in endeavoring to control hemorrhage by the internal administration of the simple astringents, we only contract the vessels from which the blood is flowing, at the expense of causing a proportionate increase of tension, and consequently do not at all affect the rapidity of the loss of blood. There is, of course, a similar objection to the use of these substances in controlling inflammations.

Therefore, do not let us use astringents, given *per oram*, as any aid to the treatment of hæmoptysis, erysipelas, or any other conditions where we desire to cause a decrease of the supply of blood to the part.—W. A. Walker, *Boston Med. and Sur. Journal.*

EXAMINATION OF URINE FOR LIFE INSURANCE.—Dr. Charles W. Purdy, of the Chicago Post-Graduate Medical School Staff, closed a recent lecture with the title above by formulating the following rules:

1. If albumen is found in the urine, do not recommend the applicant for insurance because the quantity of albumen present is small, even though it be mere traces.

2. If albumen is present in the urine and the applicant is over forty years of age, decline the application.

3. If albumen and renal casts are found in the urine, decline the application regardless of the age of the applicant or the quantity of albumen present.

4. If albumen is found in the urine in large amounts—two or more grammes to the litre—decline the application.

5. If the applicant is of middle age or over and has always been a generous eater, especially of meat; and if he rises regularly at night to void considerable quantities of clear urine of low specific gravity; and if, in addition, there is decided tension of his pulse with accentuation of the second sound of the heart, decline the application, even though the urine is free from albumen.

6. If true renal casts are unmistakably present in the urine, either epithelial, granular, fatty, hyaline, or composite, decline the application, even though the urine is free from albumen.

7. If the specific gravity of the urine is normal (1.020) or above, but it contains albumen at times, while at other times it contains none, especially on rising in the morning, and no casts are present in the urine of an applicant who is under thirty years of age and apparently in good health, the albuminuria is doubtless of the so-called functional form, and, in the discretion of the home office, the application may be accepted for a ten years' endowment policy. As yet, however, such risks cannot be considered altogether safe for life policies.

8. If the applicant is subject to frequent or occasional attacks of gravel—one or more of which was recent—the application should be declined.

9. If the applicant has had attacks of gravel and more or less dull pain is present in the renal region, and the urine is more or less turbid from the presence of pus, the application should be declined.

10. If the applicant has had attacks of gravel, but five years have elapsed since the last attack, the urine remaining perfectly normal, and no pain is present in the region of the kidney, the application may be accepted.

11. If the applicant is over fifty years of age and voids his urine with more or less slowness and difficulty at times, the stream being small, forked, or dropping, and at times involuntarily shutting off before the finish, and if he rises regularly at night to void urine and is subject to periodical attacks of frequent urination, the application should be declined, even though the urine itself is in every respect normal.

12. If the urine contains sugar, the application should be declined.

13. If the urine is turbid from admixture with pus or blood, the application should be declined.

—*Dixie Doctor.*

IN St. Louis, the *Medical Record* tells us, there has occurred a modern miracle. A woman had suffered long from a cerebral abscess, threatening blindness. In a paroxysm of pain she swallowed a relic; and next day a needle came out of her eye with the relic transfixed. The passage of the relic from the stomach to the eye recalls the miraculous birth of Gargantua from his mother's ear.

The Times and Register

A Weekly Journal of Medicine and Surgery.

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THE CITY HOSPITAL EXAMINATIONS.

THE examinations for Resident Physicians at the Philadelphia Hospital deserve more than a passing notice. Whatever may have been the character of these examinations previously, it is certain that for the past two years they have been perfectly impartial; and the verdict has been as nearly accurate as the capacity of the examiners permitted.

While the three colleges for males are each represented on the Board by a member of their staff, no one of these gentlemen has felt or acted as if he were the special advocate of his own school; but has held the interests of all the candidates to be equally confided to his custody. In point of fact, the Woman's College, which is not represented on the Board, has in both examinations been awarded the highest average—an honor fully merited by the excellent scholarship of her representatives.

This year, each member of the Board after making the examination separately, agreed in giving the first place to Mr. Heard and Miss Sherman, and placing Miss Cone next. Throughout the list, the variation between the marks of the three examiners was very slight, except in a few cases; and there the difference was rather in the time given to the examination of the papers, than in the estimate of their value. The labor involved was enormous. Days, and even weeks, were required to analyze, tabulate, and compare the answers given by fifty-seven candidates to the fifteen questions.

The results of this competition differ considerably from those that the same candidates passed through at some of the other city hospitals, where there was simply an oral examination. For instance, one of the five who failed in the Philadelphia Hospital trial, passed first at another hospital, over a number of those who took high places in the former. At another hospital, the Resident selected in preference to some of our best men, failed to pass the final at his college, and was thus rendered ineligible. In a third case, the candidate who was graded No. 11 by us, won the Residency at another hospital, over some of those who were at the head of our list. In this case, however, the student probably won by his answer upon a subject that had been a special hobby of the examiner from his college, and hence was not touched upon in our examination. From these results we are warranted in claiming that with such students as are sent out from the colleges to-day, justice cannot be done by an oral examination; for it is simply impossible for any man of ordinary intellect to retain in his memory the answers given by a number of persons with sufficient accuracy to compare them.

The questions were as follows:

1. Describe interstitial and desquamative nephritis, and amyloid kidney.
2. Tabulate the forms of intestinal obstruction, with their treatment.
3. Give the causes and treatment of peritonitis.
4. Names and doses of principal cardiac stimulants and sedatives.
5. Give the causes and treatment of endocarditis and pericarditis.
6. Describe the methods of delivering the head in breech presentations.
7. Give symptoms and treatment of gonorrhœal ophthalmia.
8. Give the treatment of post-partum hemorrhage.
9. Treatment of puerperal eclampsia.
10. Tabulate the causes of retarded labor.
11. Give the symptoms of foreign bodies in the air-passages.
12. Treatment of secondary hemorrhage.
13. Diagnosis between suppression and retention of urine.
14. Give a list of necessary appliances in ligation of the femoral artery.
15. Give the treatment of epistaxis.

It will be seen that these questions are quite elementary; and yet they cover a pretty wide range. It was the examiners' intention to select the subjects that would most likely come before the Residents in their official capacity. That there were only five failures out of fifty-seven shows how high was the grade of the candidates. It would be invidious and unjust to these young men and women to pick out the flaws in so creditable a performance. Mistakes as to fact were almost unknown, the grading being made upon the relative merits; and those who obtained low averages erred rather in omitting material facts than in making misstatements. These omissions are, perhaps, to be attributed to the shortness of the time allowed—but three hours for all the questions.

As in the case of last year's examinations, the poorest answers were given upon the simplest question; that relating to the necessaries for a surgical operation. Few took the pains to go through the steps of the operation mentally, and scarcely any would have been able to complete it with the articles in their list. There was a very general neglect of anesthetics, and of means for resuscitating the patient in case of accident. Assistants, operating tables, and basins for instruments were generally ignored. To this there were some brilliant exceptions, and one man,

who will be heard from some day, remarked that in an emergency he would ligate the femoral artery with a penknife and a string, if nothing better were attainable.

As these answers may fairly be held to represent the present teaching of the Philadelphia schools, an analysis of two may be of some interest.

To the question relating to the treatment of eclampsia, the following answers were given:

1. As prophylactic, examine the urine during pregnancy, and place patient under treatment before labor begins, 17.
2. Deliver immediately, 22; of whom 14 describe the method.
3. If labor has not commenced, induce it at once, 6; do not, 1.
4. Wait for dilatation of os before delivering, 8; do not wait, 9.
5. Induce labor if there is albuminuria, and convulsive symptoms appear, 5.
6. Remove cause, if found, 4.
7. Rectify mal-position, 1.
8. Protect patient from self injury, 17. Of these 12 mentioned means, such as the gag.
9. Venesection, 30; qualified by condition of patient, 17.
10. Arteriotomy, 2.
11. Ice or cold to head, 8.
12. External heat, 34; by hot bath, 27; blankets, 8; bottles, 2.
13. Cause diaphoresis by heat, 22; by moisture and blankets, 21; vapor bath, 1.
14. Nutrient enemas, 2.
15. Milk diet, 12.
16. Hot drinks, 5.
17. Counter irritation, 1.
18. Cups to back, wet, 1; dry, 1.
19. Diuretics, 18.
20. Diaphoretics, 7.
21. Sponging, 1.
22. Croton oil, 29.
23. Chloral, 52; as prophylactic, 1.
24. Bromides, 29.
25. Chloroform, 45; anesthetics, 3.
26. Ether, 7; do not use it, 2.
27. Morphine, 8; with care, 1; opium, 6.
28. Veratrum viride, 24.
29. Pilocarpine 14; do not use it, on account of its tendency to induce pulmonary œdema, 3; use with care, 5.
30. Nitrite of amyl, 8; nitro-glycerine, 1.
31. Salines, 6; concentrated, 8.
32. Citrate potassium, 2.
33. Elaterium, 4.
34. Digitalis, 6.
35. Alcohol, 2.
36. Caffeine, 3.
37. Basham's mixture, 5.
38. Paraldehyde, hypnone, gelsemium, physostigma, calomel, ammonia, viburnum, 1 each.

Here is surely variety enough, and yet we believe that every experienced practitioner will see with surprise that only one has thought of seeking the cause of threatened convulsions in an obstruction to delivery.

To the question as to the treatment of post-partum hemorrhage the following replies were given:

1. Evacuate contents of uterus, 39.
2. Contract uterus, 49; by pressure, 16; by friction, 39; internal manipulation, 8.
3. Intra-uterine tampon, 33; of antiseptic gauze, 3; iodoform gauze, 21; cotton, 3; wool, 2; linen, 1; styptic gauze, 1; tampon vagina, 5.
4. Cold externally, 29; internally, 38.
5. Hot water douche, 44.
6. Vinegar in womb, 39; hot, 3; on tampon, 14.
7. Electricity, 24; method, 4.
8. Compression of abdominal aorta, 8.
9. Compressing lips of cervix together, and against pubes, 6; bending cervix, 3.
10. Depress head, 28.
11. Elevate limbs, 5.
12. Transfusion, 19; blood, 9; saline solution, 10.
13. Auto-transfusion by bandaging limbs, 20.
14. Credè's method, 8.
15. Laparotomy and ligation of cervix, 1.
16. Alternate heat and cold, 4.
17. Subcutaneous injection of saline solution, 18.
18. Keep up bodily heat, 18.
19. Hot enemas, 12; saline, 4; milk, 1.
20. Ergot as prophylactic, 17.
21. Binder, 10.
22. Apply child to breast, 3.
23. Antisepsis, 10.
24. Repair laceration, 3.
25. Turpentine enema, 1.
26. Internally: Stimulants, 6; alcohol, 16; amyl, 3; strychnine, 3; ammonia, 3; digitalis, 5; gallic acid, 1; ergot, 23; oil of erigeron, 1; coffee, 13.
27. Hypodermically: Alcohol, 10; amyl, 1; strychnine, 4; ether, 12; nitro-glycerine, 1; digitalis, 3; morphine, 6; ammonia, 5.
28. Locally: Lemon juice, 5; Monsel's solution, 20; tincture of iron, 4; tannic acid, 3; gallic acid, 3; iodine, 3; almus, 1; oil erigeron, 1.
29. Styptics only to be used as a last resort, on account of sepsis from clot, 19.

It is difficult to believe that any hemorrhage could withstand such a broadside. That less than half should lower the woman's head, only five elevate her legs, and but three apply the child to the breast, shows that the class contained few members who could boast of practical experience. The vigorous denunciations of the vaginal tampon must be out of date nowadays, as five recommended this measure. We will charitably suppose that this was a *lapsus pennæ*, and that the intra-uterine tampon was meant.

CHRISTIAN SCIENCE is not dead, though its principles are as certain as those of the Economites to produce extermination of the race in time. In St. Louis, the daughter of a prominent lawyer is said to have just died of typhoid fever and neglect. She was a beautiful and talented girl, seventeen years old, and a general favorite. Christian science conducted her case to that bourne whence no typhoid case returns.

Annotations.

DR. J. C. Culbertson, who has long guided the destinies of the Cincinnati *Lancet-Clinic*, has accepted the editorial management of the *Journal of the American Association*. Dr. Culbertson is very popular with all who know him, and under his rule the journal will undoubtedly prosper. It is, however, much easier to criticise than to commend, and the new editor will find his position anything but a bed of roses; while Dr. Hollister will now, perhaps, receive some of the credit he has deserved for his good work. The *Lancet-Clinic* will be edited by Drs. Richardson, Oliver and Colter, Mr. H. C. Culbertson retaining charge of the business management.

WE have received the First Annual Report of the Midwifery Dispensary of New York City. It is one of the greatest faults in the teachings of our medical schools that the medical student is launched into practice with usually little or no instruction in practical obstetrics. The degree of Doctor of Medicine is conferred upon the student without his having, in many cases, ever attended even a normal labor. This state of affairs should be remedied as soon as possible, and an institution like the Midwifery Dispensary is a step in the right direction. Here the student or graduate can, for a prescribed fee, attend cases of labor. He is required to reside at the dispensary, and conform to certain rules. The institution resembles, in essential respects, our Lying-in Charity. The attendance of medical students upon some such school of instruction should be compulsory, and not voluntary, as it is at present.

ONE of the most serious results of the calamity that has fallen on the city and State treasuries, is that there will probably be vetoes plenty of the appropriations for hospitals and other charities. The State will have no money to spare for anything beyond necessities; and when fixed charges are met, there will be few institutions that can be provided for. This is most unfortunate; as there are a number of most worthy objects for State aid. Among these, none are more commendable than the Zoölogical Society. The beautiful garden forms an attractive and instructive resort for thousands of the old and young. The rapid extermination of wild animals renders these collections continually more important. They serve to direct the attention of the young to the study of natural history, and by bringing together the animals of many countries they give children an insight into geography and history such as they never obtain from books. It is by no means the city alone that is interested in this society, although, naturally, city residents have the greatest opportunity to profit by it. We do not know if the society has ever attempted to supplement its work by the organization of county branches, but much good could be thereby done. The principle of "University Extension" could easily be applied here.

"THE evil attributed to condiments," says Juliet Corson, "is more or less a fanciful one. In any case it arises from the abuse of them. Children need but little stimulating matter mingled with their food, a moderate quantity of salt and very little, if any, pepper being all that is required for savor. But adults can use the many kinds to advantage. As a matter of fact, a great deal of mischief is done by people of a single idea, who disregard all evidence save what they consider the proof of their own senses. If they fancy that pepper injures their little stomachs, straightway all the rest of the world is to foreswear its use."

Miss Corson shows considerable knowledge of human nature, but very little of physiology or therapeutics. Condiments should be regarded as medicines, to be used only as directed by the physician, or some one else who is capable of distinguishing between a temporary benefit and the ultimate disaster to the digestive organs caused by the habitual use of these stimulants. Still, it only makes a difference of, possibly, twenty years of healthy life; and there are very many people whom the world can very well spare at the earlier period. Among those we would unhesitatingly place those who would teach people the indiscriminate use of condiments.

THE seventeenth annual report of the Michigan State Board of Health has been placed before the public. It is to be hoped that these volumes will escape the ultimate fate of public documents, and serve a better purpose than being transformed into scrap-books by the children of bucolic constituents. Dr. Baker gives an illustration of what may be derived from an intelligent study of statistics. For instance, speaking of the relations of "cold weather" diseases to meteorological conditions, he states that when there is more than the average prevalence of pneumonia, diphtheria, tonsillitis, influenza, scarlatina, rheumatism, neuralgia, pleuritis, or consumption, there is also an increase in the average daily range of temperature, relative humidity, cloudiness, ozone, force of wind, barometric range, and atmospheric pressure; while the average daily temperature and absolute humidity were below the average for the year.

In regard to diarrhœa, its prevalence coincided with an increase in the average daily temperature range, average daily temperature, absolute humidity, barometric range, and atmospheric pressure, and a decrease in the relative humidity, cloudiness, ozone, and velocity of wind.

In months when more than the average of reports stated the prevalence of cholera infantum, malarial fevers, typhoid, measles or whooping-cough, the average daily range of temperature, average daily temperature, absolute humidity, barometric range, and average daily atmospheric pressure were greater than the average for the year; while the relative humidity, cloudiness, ozone and velocity of wind were below the average.

The "average disease" is stated to be 24 per cent. This does not imply that that proportion of Michigan's hardy population was reported sick, but that of the twenty-eight diseases upon which reports were made from the various districts of the State, their prevalence was reported in that frequency. From a study of these reports the proposition is deduced, that an increased prevalence of these twenty-eight diseases corresponded with an increase in the daily temperature variation, in the absolute heat and humidity, barometric range, and atmospheric pressure; and a diminution of the relative humidity, cloudiness, ozone and velocity of wind.

The total cost to the State of diphtheria, for ten years, Dr. Baker estimates at $1,024,920; or $20 for each case. Of this sum, more than one-half would have been saved by isolation and disinfection alone.

Evidence is given showing that the diphtheria germ was probably active in a house two years after it was last known to have previously prevailed therein. This, however, cannot be cited as an instance of the prolonged viability of the diphtheria germ, unless it is shown that this micro-organism cannot reproduce outside of the animal. The writer has had several instances that go to show that this disease may infect a house for many years, when a suitable nidus is offered for the reproduction of the germs, in deposits of filth supposed to lie undisturbed.

From the foregoing citations some idea may be formed of the great practical value of the work of Dr. Baker and the Michigan State Board of Health.

Letters to the Editor.

THE "PURE WATER" SWINDLE.

A YOUNG and honorable drug clerk in one of our Chicago "drug palaces" was instructed by his employer to sell hydrant water to customers when they asked for certain spring water which the house advertised as on sale. Finally, a customer trapped the druggist into an admission of his "trick of the trade," but the latter publicly and hypocritically reprimanded the clerk. Soon afterward the clerk resigned and applied for a recommendation, which was at first refused on the ground of the clerk having "deceived the public and his employer" in the manner claimed. Thereupon the youngster, who is not backward in asserting his rights, proceeded to damn Mr. Druggist up hill and down dale, for hypocrisy, theft, and so on, stating that all the other employés knew of the instructions to falsify, and reluctantly the recommendation was given.

The "pure water fake" is very profitable in this city as well as elsewhere. Thousands of barrels of most ordinary, and often even unfiltered, water are daily sold to the gullible public at prices ranging from five cents per glass downward.

Specimen bottles containing a dash of common table salt in solution are cheekily sent to physicians, and the labels contain autographic recommendations of medical politicians. Gullibility springs perennial, it merely adopts new directions.

S. V. CLEVENGER.

CHICAGO, ILL.

TREATMENT OF BURNS.—I was called to see Mr. S., who, while preparing to make a blast in a well, upon testing some powder that had lain in a damp place, let ten or twelve pounds ignite, burning his face, hands, and arms severely, his arms being burned to the elbow, a woolen shirt which was rolled up preventing it from burning any higher. Upon arrival, found him suffering great pain and some shock. Gave opiates and brandy, applied thick coating vaseline and boracic acid; covered this with oiled silk. Removed dressing Sunday; found it doing well; dressed again and let remain three weeks. Upon removing it, the epidermis peeled off like a glove, leaving a very tender but otherwise as good hand as it was before.

On August 12, 1890, attended three men who had been severely burned by explosion of powder. Treated very much the same as above. Two of them are practically well, and the other also, as far as the burn is concerned, but he has lung complications which will probably result fatally.—*Ala. Age.*

The Medical Digest.

THIS excellent formula for a sedative lozenge is taken from the list of John Wyeth & Bro.:

℞.—Morphinæ bimeconat..... gr. $\frac{1}{100}$.
Cocain. hydrochlor..... " $\frac{1}{125}$.
Tinct. aconiti..... ♏ $\frac{1}{2}$.
Rad. althæa rad..... gr. $\frac{1}{2}$.
M.—Make one troche.

A WARNING ABOUT THE FORCEPS.—In a recent clinical lecture Dr. Goodell said to his class: "Let me warn you, as young men, to resist the temptation of keeping the forceps on too long, in your undue haste or excitement to deliver the woman. Make it your rule always to take them off when the head is well down and the perineum begins to bulge, unless the pains have stopped, or the woman is in puerperal convulsions, or she is in any condition demanding prompt delivery. By observing this precept you will at least avoid the accusation that 'the doctor tore her with his instruments;' for indeed it is too true that the physician, in his haste to deliver, does often tear his patient either by a too hasty delivery or by pulling parallel with the long axis of the woman's body, instead of following the curve of the Carus."—*Practice.*

ALVEOLAR ABSCESS.—To relieve the pain that accompanies the formation of an alveola abscess I was led by theoretical reasons to the use of secale cornutum in a few cases with prompt and marked relief resulting. Its physiological action is to contract the arterioles at the painful point, thus lessening the hyperemia pus formation and suffering. This neuralgia is a congestive one and the drug antagonizes that condition. The contra-indications for its use would be during menstruation, pregnancy, kidney, or heart disease, or cerebral anæmia. When these are absent, the safety of the medicine as compared to the alkaloids in general use for toothache especially, recommend ergot. Squibb's fluid extract should be used, 10 drops every ten minutes, until relieved, which should occur before six doses are taken.

—*S. V. Clevenger.*

MYDRIATICS AFTER CATARACT OPERATIONS.—A well known Mexican oculist believes that the use of mydriatics after cataract operations tends to favor the formation of secondary cataracts. This action of eserine suggested the idea of employing it to prevent hernia of the iris after a cataract operation. He believes that if the work is well done, the corneal incision well cleaned, and the lips of the wound nicely adapted, that the instillation of eserine is useless, but if the patient should vomit, then eserine is useful, and he sometimes uses it.

The change after operation causes an exaggerated contradiction of the pupillary sphincter, and greatly favors the adhesions of the iris with capsulary fragments and exudative deposits that may form afterward. For these reasons he has abandoned the use of the mydiatics after cataract operations, except in cases in which they are especially indicated.

When capsular cataract forms, notwithstanding the perfectness of the operation, he believes that it is best treated by simple decision, as is practised by Galezowski. The operation is simple, easy, and nearly always gives excellent results.

—*Memphis Med. Jour.*

RULES FOR PERSONAL DISINFECTION OF THE ACCOUCHEUR.—At the University of Pennsylvania every student who attends a case of labor in the Maternity Pavilion is required to roll up coat and shirt sleeves, scrub arms, wrists, and hands with nail-brush, soap, and warm water.

Put on disinfected gown, tying sleeves below coat sleeve.

Pare and clean finger nails; rinse hands and wrists in alcohol.

Immerse hands and wrists in a 1–1,000 bichloride of mercury solution for at least one minute.

The hands are not to be dried on a towel, but may be wiped on front of gown.

After labor a record is made of the infant's condition, and of the appearance presented by the fœtal appendages. During convalescence notes are taken on the progress of mother and infant.—*Practice.*

NEVER send a patient to sea who is compelled to live on a limited diet, unless he can take the requisite food along with him, a ship being the poorest place in the world where to obtain any special article of diet. More ground will be lost by patients under such circumstances in one week than can possibly be regained in many months following, on shore, even under the most favorable conditions. There cannot be the slightest doubt in the world that a sea-voyage may be, and is, beneficial in a great majority of chronic cases, but it should be a voyage chosen for its especial adaptability to the case in question, and the climate, class of steamers, food, etc., should have the careful consideration of the family physician before he sends his patient on a month's voyage by water, for a lack of information on the physician's part may mean improvement to the patient, and may mean death, whereas positive knowledge would insure improvement.—*Sanitarian.*

THE formulas for Goddard's astringent gargle are published in the *American Journal Pharmacy* as follows:

Fol. rosæ rub.	2 drams.
Aquæ bullientis	5 ounces.
Acidi sulphurici diluti	½ dram.

Infuse, when cold, strain and add:

Mel. despumati	1 ounce.
Acidi tannici	2 scruples.
Aluminis	2 drams.
Spts. vini rectif.	
Aquæ rosæ	āā 6 drams.

Mix.

The other formula contains pomegranate rind in place of tannin, but this is preferable.

Take of—

Red rose petals	2 drams.
Pomegranate rind	4 drams.
Boiling Water	6 ounces.

Infuse, strain and add:

Alum	2 drams.
Clarified honey	1 ounce.

Mix. Filter.

THE EXAMINATION OF THE BLOOD FOR LAVERAN'S MALARIAL GERM.—Laveran's directions for examining the blood of malarious patients are as follows: The blood should be taken at the height of a fever attack, and from a patient who has had no quinine for some time. The blood should be taken from a finger tip after a thorough cleansing of the skin to be pierced. The cleansing should be such as to prevent all chance of contamination of the blood as it oozes out. The drop so obtained is to be taken up on a clean cover-glass, and a second cover placed upon it, so that a thin layer of blood may be obtained between two cover-glasses. This fresh preparation is then to be examined by daylight and with a dry lens of high power. In this way one will oftenest be able to see the flagella on the periphery of the round pigmented free corpuscles. If a dry preparation be desired, then the cover-glasses must be separated from one another, and the blood dried by passing the cover-glass three times through a flame. The specimen can then be examined either unstained or stained. Laveran stains with a concentrated watery solution of methyl blue, before using which, he washes the cover in a mixture of equal parts of alcohol and ether. By this method the neuclei of the white blood corpuscles are stained dark blue, the free round bodies, or those attached to the red blood corpuscles, a pale blue, while the still growing corpuscles stain hardly at all. For specimens so prepared, Laveran recommends dry lenses also.—*Canada Practitioner.*

LIEBREICH'S REMEDY FOR TUBERCULOSIS.—There evidently exists a decided antagonism between the pneumococcus and the bacillus tuberculosis. It is considered an established fact that certain species of bacteria are antagonistic to other species of germs. According to my own idea, such an antagonism can be of a twofold character: it may be either chemical or dynamical. Some bacteria are antagonistic to each other outside of the animal organism on account of their metabolism products, whereas other bacteria prevent the growth and multiplication of other species only within the human or animal organism. This latter phenomenon I call "dynamic antagonism of bacteria" in distinction to the chemical antagonism, which exists outside the body and depends on the ptomaines and other products of metabolism. Applying this to our subject proper, we may say that the pneumococcus and the bacillus tuberculosis are dynamic antagonists. Which is the chief dynamical characteristic of a pneumococcus invasion of the lungs? Is it not the transudation of blood-serum from the pulmonary capillaries? Therefore, if we can find some mineral, vegetable, or animal substance which is capable of producing a transudation of serum from the lung capillaries, such a substance could be considered a dynamical substitute of the pneumococcus.

I think, Liebreich has found such a substance in cantharidin, and has, therefore, given us the theoretically ideal remedy for pulmonary consumption. The practical results so far obtained with this therapeutical agent seem to confirm its theoretical importance. It is strongly to be wished that those of our physicians who have ample opportunity to carry out the clinical experiments with respect to the therapeutic effects of cantharidin, should do so without delay. Its use—as compared to Koch's "lymph"—is harmless.

The solution for injection is prepared in the following manner:

Take 0.20 gramme of cantharidin and 0.40 gramme of hydrate of potassium, or 0.30 gramme of hydrate of sodium. Weigh exactly, and add 20 ccm. of distilled water. Warm in a warm bath until a clear solution is obtained. While the warmth is obtained, add gradually distilled water until the solution becomes cold, then add cold distilled water until the whole amounts to exactly one liter.

One cubic centimeter of this solution contains 0.0002 gramme of cantharidin. The normal dose for injection is 0.0001 or 0.0002 gramme, but it is probably better to commence with ½ decimilligramme, *i. e.* ¼ of a cubic centimeter of the solution. The maximum dose is 0.0004 gramme. The injections should not be made daily, but alternately on every other day. Renal disease is a contra-indication to this treatment. If an injection is followed by diarrhœa, strangury, or albuminuria, the injections have to be interrupted for some time; from five to ten drops of tincture of opium will promptly allay such symptoms. The most suitable place for injection is between the two shoulder-blades. In injecting, the ordinary rules and precautions are to be observed.—Moore, *Med. Record.*

Nicotine Psychosis.—Dr. Kjellberg, of Upsal, has availed himself of his opportunities to study the process of intoxication by nicotine as witnessed in the factory men, who consume large quantities of chewing tobacco. He describes a peculiar and progressive intoxication characterized by a special form of mental aberration, which ultimately takes a suicidal turn. During the preliminary stage, which lasts from six weeks to three months, the sufferer becomes anxious and melancholy, and complains of distressing attacks of cardiac palpitation. The malady announces its onset by hallucinations of sight and hearing, the patient is prostrate and seeks quiet in order to brood over imaginary woes. The intelligence, however, remains intact. In the second period the patient becomes gay, and his quasi-delirium resembles that of general paralysis, but he is subject to periodical attacks of maniacal violence, remaining stupid and dazed in the intervals. Ultimately, the paroxysms give way to a condition of physical depression which contrasts strongly with the relative preservation of physical energy. At this stage a complete return to health is no longer possible. The author states that the chewing of powdered tobacco is far more virulent than that of the traditional "pig tail."—*Med. Press.*

An Unusual Symptom in Middle Ear Disease.—That sound caused by air entering the middle ear on inflation can usually only be heard by means of the diagnotic tube, induces me to put the following case on record. Grüber says, speaking on this point, "for the more distinct perception of which (sound) the otoscopic tube is employed." Politzer, "which (sound) can be perceived either by placing the auricle immediately to the concha of the person," and also "this blowing sound has various degrees of strength and distinctness."

The patient, a young lady of twenty-one, was under treatment with middle ear catarrh due to Eustachian obstruction; air would not enter the cavities of the tympani either by Valsalva's or Politzer's method, and could only be driven in through a very fine catheter; the finest Eustachian bougie failed to enter the tube at all. Hearing (watch) left normal, and right four inches; after inflation eighteen inches. On February 20, 1891, I examined the nasopharynx under ether, and, finding some adenoids, they were removed with Daly's scraper, and a week afterwards the nose was irrigated with an alkaline solution. After this had been employed daily for some days, my patient imformed me, that when she blew her nose her left ear made a noise which her sister heard "across the room." I examined the ear, and found the drum apparently normal; the hearing of the right ear was now five feet. On April 6, I was sent for and told the noise was again present. On my arrival the patient used her saline solution and inflated her tympanum. I then heard the sound, and though I stood twenty feet away, I still heard it distinctly. It resembled the sudden inflation of a small bladder. Testing the Eustachian tubes, a large-sized bougie entered freely.—Lake, *Lancet.*

Treatment of Some Forms of Corneal Opacities by Rubbing.—The methods of treating corneal opacities are numerous, all having the same aim, that is, of mechanically removing or thinning the opaque cornea. None of these methods, however, can be regarded as satisfactory, and if any improvement be effected by their use, it is usually slow in coming, and a patient with an otherwise sound eye has difficulty in getting good vision, owing to a small blot in the way.

On reading Costomiris' attempt to revive the treatment of affections of the cornea, particularly opacities, by licking, it occurred to me that as few could be induced to undertake such a task, an artificial tongue, in the shape of an ordinary India-rubber pencil eraser, might serve the same purpose. I accordingly adopted the following method:

Having first anæsthetized the eye with cocaine, I gently rubbed the opaque portion of the cornea with the rounded end of a rubber eraser for about half a minute or less. No pressure was used; the weight of the rubber itself gave sufficient pressure for the purpose. This "rubbing" was repeated every second day for a considerable period with satisfactory results, as will be seen below.

The first case in which the treatment was tried was that of M. McK., aged twenty four years. Has had central nebulæ in both eyes "for years." March 11, r. v. = $\frac{3}{60}$, l. v. = $\frac{6}{18}$ partly. Both eyes subjected to the treatment. March 18, r. v. = $\frac{6}{60}$, l. v. = $\frac{6}{18}$. March 25, r. v. = $\frac{6}{24}$, l. v. = $\frac{6}{12}$ partly. April 1, r. v. = $\frac{6}{18}$, l. v. = $\frac{6}{9}$ barely. June 2, r. v. = $\frac{6}{18}$, l. v. = $\frac{6}{9}$. Treatment was then stopped. On seeing the patient six weeks after, she still retained the same improved vision.

The next case was that of M. R., aged ten years. Has a large nebula in right eye, and a central nebula in the left eye. Treatment commenced on March 24, r. v. = fingers at seven feet, l. v. = $\frac{6}{24}$. April 3, r. v. = fingers at seven feet, l. v. = $\frac{6}{24}$. April 6, r. v. = fingers at seven feet, l. v. = $\frac{6}{18}$ partly. April 25, r. v. = $\frac{6}{60}$ dimly, l. v. = $\frac{6}{12}$ barely. May 10, r. v. = $\frac{6}{60}$, l. v. = $\frac{6}{12}$. Treatment then ceased. Neither of the two patients attended regularly. A third made similar improvement. A fourth showed no improvement; but this was subsequently found to be due to a diseased fundus.

I would recommend this method of treatment as suitable for cases in which small central nebulæ interfere with vision. It might, however, be tried in cases where larger portions of the cornea are affected, but great improvement in vision cannot be expected in such cases. The opaque spot should be gently stroked or rubbed with the least pressure possible. Vigorous rubbing will only irritate the eye unnecessarily. A drop of a weak solution of atropine might, with advantage, be instilled into the eye after each application of the rubber.

It might, perhaps, appear premature on my part to bring to notice the results of a few cases only, but as suitable material has been slow in coming, I thought that possibly those who have large clinics might like to try this novel treatment.

—Ferdinands, *Brit. Med. Jour.*

ALLINGHAM'S OINTMENT FOR HEMORRHOIDS:

℞.—Bismuth subnit..... ℥j.
Hydrarg. subchlorid..... ʒij.
Morphine..... grs. iij.
Glycerini..... ℥ij.
Vaselini..... ℥j.
M.—Sig. Use in pile-pipe.

HOT COLON DOUCHES FOR PELVIC PAIN.—The patient is to lie on the left side, with left arm behind the back, legs partly drawn up, hips on a pillow or folded blanket, the chest low; in short, in the Sims position. This position allows the patient to administer the injection by the use of the right hand. It is always better, however, to have an attendant administer the injection if possible. If an attendant gives it, the patient might better lie directly on the face with a folded blanket or pillow under the thighs. The water is to be of a temperature not more than 112° F. nor less than 106° F. From a pint to two quarts of the hot liquid should be slowly injected, and retained for a few minutes. If there are fæces in the rectum, as is usually the case, the injection and the fæces will be quickly ejected. Then at once have the patient lie down and repeat the hot injection, using a larger quantity the second time. This will be retained longer and will almost certainly relieve the pain. When this is expelled the patient should lie down again, and about a pint of hot water should be injected; this will be retained if the patient lies quiet, and it will be discharged from the system through the kidneys. If the patient is at all weak, it is wise to administer a stimulant before giving the injection.—Forest, *Med. Record.*

EPIDEMIOLOGY OF INFLUENZA.—*The British Medical Journal* says that in spite of considerable increase in our knowledge of the behavior of epidemic influenza gathered during the past year, much still remains very mysterious. It is, however, certain that one attack does not protect from a second, as already many persons who suffered during the last epidemic have suffered again now. A curious point, however, is that the disease, it appears, tends to recur at long intervals, each recurrence consisting of two, or sometimes three, epidemics. We find, on referring to Dr. Symes Thompson's historical survey in his edition of his father's work on Influenza, that an epidemic occurred in 1510, and again in 1557 and 1580. A long interval then elapsed without reliable records until 1658, 1675, and 1710. A series then occurred —1732-3-7-8-43—during which the disease was scarcely absent for more than three or four consecutive years. After an interval of fifteen years came the epidemics of 1758-62-67-75-82. Twenty years then passed till the 1803 epidemic; then, after an interval of twenty-eight years, that of 1831. As in the preceding century, the "thirties" proved fertile, for 1831-33, and 1837 were all years of marked epidemic prevalence. Ten years later came the 1847 epidemic, which Dr. Peacock described so accurately; then, after an interval of forty-two years, that of 1889-90, to be followed this year by further epidemic prevalence.

PETROLEUM IN CONJUNCTIVITIS.—At the recent meeting of the French Society of Ophthalmology, in Paris (May 4 to 7), M. Trousseau, of Paris, gave an account of the results he had obtained with petroleum in the treatment of conjunctivitis (*Semaine Médicale*, May 6, 1891). He had for two years sought for a substitute for nitrate of silver and sulphate of copper, both of which caused violent reaction and acute pain. Among the substances tried, petroleum seemed to him the most satisfactory. It was less active than nitrate of silver and sulphate of copper, but had the advantage of causing neither pain nor reaction, and it was perfectly well borne by the most sensitive cornea. He used crude Caucasian petroleum; its derivatives were less active and sometimes more irritating. It should be painted over the conjunctival surface of the eyelids and the *cul-de-sac* with a soft brush. The applications should be prolonged, and their thoroughness should be proportionate to the condition of the mucous membrane; they should be repeated two or three times a day. In cases of granular conjunctivitis, M. Trousseau said he had had good results from thoroughly brushing the mucous membrane with a toothbrush saturated with petroleum. In cases of catarrhal conjunctivitis, applications made twice daily quickly dry the mucous membrane, which soon recovers its natural appearance. In muco-purulent conjunctivitis the effect is not so rapid, and the treatment sometimes fails. In follicular conjunctivitis, and in cases of purulent conjunctivitis when the inflammation is on the decline, petroleum acts extremely well. In granular conjunctivitis the effect of petroleum is variable, but not more so than that of the ordinary remedies; in these cases petroleum may be advantageously used as a preliminary to other treatment. Trousseau recommends the drug particularly for children and "pusillanimous subjects," on account of its causing no pain. He added that experiments made by M. Dubief had shown that petroleum has antiseptic properties of moderate intensity.—*Brit. Med. Jour.*

CHLORALAMIDE.—The following summary embodies the results of the observations detailed in this contribution to the study of chloralamide:—

1. The reflex irritability of the spinal cord was diminished.
2. Peripheral sensation was not reduced.
3. On frogs there were hypnotic action, slowed respiratory and cardiac actions, abolition of reflexes, and subsequent recovery of the normal condition.
4. Blood pressure was slowly reduced with large doses.
5. Pulse rate was not affected.
6. Respirations were reduced and finally abolished.
7. The conductivity of motor nerves was destroyed, and was not restored by subsequent washing in salt solution.
8. The irritability of muscle substance was destroyed, and was not restored by subsequent washing in salt solution.
9. The excretion of urea was increased by small doses—0.3 to 0.6 gramme—but was diminished by large doses—2 to 3 grammes.
10. The excretion of phosphates was diminished with both large and small doses.
11. The excretion of the fluid constituents of the urine was not constantly affected by the smaller doses, but was diminished by the larger doses.
12. Reaction of urine was not influenced.
13. Color and odor of urine were not affected.
14. No albumen was detected.
15. Action on the skin was negative.
16. Temperature was not affected.
17. Digestion did not appear to be interfered with.
18. Hypnotic action in the healthy was induced with doses of 1.25 grammes and upwards.
19. In painless insomnia the results were highly reliable.

20. In insomnia with moderate pain the results were fairly reliable.
21. In insomnia with acute pain it was not reliable.
22. The analgesic action was feeble.
23. The hypnotic effect followed usually within half an hour after exhibition.
24. The sleep induced was tranquil, pleasant and natural, and the awakening free from confusion or depression.
25. No deferred action.
26. No craving for the drug was noticed.
27. The point of tolerance was not readily reached.
28. The doses found most reliable were from 2 to 3 grammes.
29. Giddiness and inco-ordination and headache sometimes followed administration.
30. In senile insomnia, pulmonary diseases, and hysteria the results were highly satisfactory.

—Gordon, *Brit. Med. Jour.*

RETURN OF MENSTRUATION AFTER THE MENOPAUSE.—I have probably met with half a dozen cases in my experience where I have been brought into very disagreeable conflict with physicians, in consequence of the diagnosis of which I am about to tell you, in a peculiar class of cases. Let me suppose you a case: A patient, say of sixty or seventy years of age, it matters not whether she be a married woman, a widow or an unmarried woman; she has been free from anything like menstruation for ten years or more, and she suddenly has a return of her menstrual flow. Now, never believe in a return of the menstrual period after the full accomplishment of the menopause. You may find a woman stop menstruating before she is fifty for two or three years, and then begin again. This is of very rare occurrence; but that it does occur, is, nevertheless, a fact. Now, after she has passed fifty years of age, and has ceased menstruating, and again begins to pass blood from the vagina, examine that woman and, in ninety cases out of a hundred, you will find malignant disease somewhere in the genital tract as the cause of the flow. The woman whose case I was supposing has been ten years without menstruating; she comes to her physician and tells him of the recurrence of hemorrhage. He is one of those men who trust not to appearances, but who examine their patients physically. He makes a diagnosis of cancer, and he bases his treatment on that diagnosis. The woman may have nothing simulating cancer in its pathology at all; she may have a hemorrhagic vaginitis. The red corpuscles and the watery portions of the blood are poured out of the walls of this old, used-up vagina, and when you make an examination you find the upper two-thirds of the canal as red as blood. As you take a sponge and pass it over the surface, you will find that the vagina is affected by a true bloody sweat. You know that the bloody sweat spoken of in the Bible is a reality. I have seen two or three cases where a bloody sweat exuded from the surface of the body. In hemorrhagic vaginitis, the red mucous membrane seems to sweat blood. Treat this condition by separating one wall of the vagina from the other constantly by means of a glass vaginal plug, making alterative applications to the parts; at times plug the vagina with iodoform gauze, and put the patient upon general tonics for the restoration of her blood state, and you will cure this supposed cancer in two or three months, and relieve thereby your patient from the prospect of an absolutely certain death.—T. G. Thomas, *Annals Gynecology.*

TWO CASES OF RESECTION OF INTESTINE BY SENN'S METHOD.—Mr. Arbuhnot Lane read accounts of two cases in which he had removed portions of the bowel and restored the continuity of the intestine by Senn's method of approximation plates. The first was a case of Littre's hernia, occurring in a woman aged fifty-three years. It was femoral, and situated on the right side. On exposing the sac it was found to be much inflamed, its contents stinking and pultaceous, and the knuckle of bowel in an obviously irrecoverable condition. Having thoroughly cleaned the bowel and sac, the abdomen was opened in the middle line, and the loop of intestine, whose segment had been strangulated, was drawn out from the abdomen, the constriction of the femoral ring having been previously divided. It was then seen that only a portion of the caliber of the bowel had been included in the sac, and that its condition was irrecoverable. Subsequent examination of the strangulated portion showed that, though there was no obvious perforation, nothing remained in many parts of its wall but the peritoneal coat. About three inches of the bowel, including the strangulated area, were excised, and the mesentery belonging to it ligatured. The divided ends of the proximal and distal segments of the intestine were closed by inverting their coats and by running along them a continuous Lembert suture. Incisions were made in the convexities of the segments, about three inches from their closed ends, and into these Senn's plates were introduced. The apertures were then brought accurately together by means of the silk ligatures. After this, two continuous Lembert sutures were applied to render the apposition of the plates more perfect, and a broad graft of omentum was placed around and fixed by means of several fine silk sutures. For a few days the patient was nourished by enemata, and later by peptonized milk. Twelve days after the operation she was enjoying a fish dinner. She experienced no pain or discomfort worth mentioning, and her abdomen remained soft and comfortable throughout. It was necessary to give her some opium for a few days after the operation, to restrain a tendency to diarrhœa. She left the hospital three weeks and four days after the operation.

The second case was a woman, aged fifty-five years, who had suffered from a strangulated femoral hernia for five days before her admission. She was very collapsed, and her abdomen was much distended. It was at once apparent that she would not stand any very prolonged operation. The sac was much inflamed, and contained a quantity of pus and fæces, and a perforated loop of small intestine. This was ligatured and carefully cleansed, the constriction being then divided. The abdomen was opened, and the damaged loop drawn out. About four inches of bowel were excised, the ends closed, and the plates inserted. It was then found that the proximal gut was very rotten, and the sutures attached to the plates tore through the softened bowel frequently. Finally, the plates were brought together in much haste, as the patient had become moribund, and a graft of omentum was attached. Mr. Lane regretted very much that he had not time to remove a further portion of the proximal bowel, but the patient's condition rendered any further delay impossible. She lived five days and two hours, the bowel yielding two hours before her death, which resulted from the escape of the intestinal contents into the peritoneal cavity through a small slough in the proximal bowel. Mr. Lane urged that the following treatment should be adopted in the future:

1. That in cases where a strangulated loop of intestine was gangrenous or ulcerated, the proximal and distal portions of the intestines should be short-circuited by means of Senn's plates, the proximal portion being at the same time relieved of much of its contents. If the condition of the patient were such as to permit of further operative interference, and provided the adhesion of the intestine to the neck of the sac and its vicinity were not too extensive, the damaged loop should be resected at the same time, otherwise it should only be incised and freely drained.

2. That as a very large proportion of cases of strangulated hernia died from obstruction after herniotomy, owing to the strangulated loop not recovering itself sufficiently to allow of the passage of the contents of the bowel through it, in any case in which the condition of the strangulated bowel aroused suspicion in the mind of the operator as to the possibility of its not recovering, the abdomen should be opened in the middle line, and the condition of the damaged intestine, as to its transmissibility, fully explored. That if there were any doubt about it, the intestine should be short-circuited, and if the condition of the damaged loop were such as to suggest ulceration and subsequent perforation, it should be excised also.

He considered the present mortality after herniotomy a disgrace to the surgery of the present day, and only to be obviated by the more efficient and thorough treatment than that at present adopted.

—*Brit. Med. Jour.*

PAGET'S DISEASE OF THE NIPPLE.—At the Royal Medical and Chirurgical Society, Anthony A. Bowlby gave a short account of thirteen cases of Paget's disease of the nipple, and, after a brief review of cases already recorded, analyzed those described by himself. A more complete description of the special clinical characters of the disease, as demonstrated by the cases detailed, was then given. The histology of the morbid tissues was then described, and the observations of MM. Wickham and Darier, as to the presence of bodies resembling psorosperms, were commented on. The author remarked that bodies of the same nature as those described by the French observers were to be found in all the cases which formed the subject of the paper, and expressed the opinion that these bodies were probably psorosperms. The pathology of Paget's disease was then discussed; and after giving reasons for believing that all changes in the breast were secondary to those in the nipple, and were not in any way causative of the so called eczema, the author expressed the opinion that the disease was parasitic in its origin. He next discussed the influence of the psorosperms in causing cancer. He concluded by expressing the opinion that there was no evidence that the cancerous growths in the cases under consideration were directly due to any specific action of the psorosperms, and gave various reasons for such a conclusion.

On Paget's Disease of the Breast.—Mr. J. Hutchinson, Jr., reported the results of examination of five cases of chronic eczema of the breast, with reference to the occurrence of parasitic bodies in that disease (coccidia or psorosperms). Specimens were shown illustrating various appearances in the surface epithelium, which the writer believed confirmed M. Darier's statement that coccidia were to be found, and sometimes in great numbers. These appearances had not been found in cases of eczema other than the chronic disease known as Paget's disease; neither were they found in all supposed examples of the latter. The writer had observed them in three out of the five cases examined. Brief reports of each were given, and the subject was illustrated by lantern demonstrations of micro-photographs, etc.

Mr. D'Arcy Power said that he had been experimenting on the origin of cancer by means of inoculations, and he had inoculated a rat with fresh scrapings taken from Mr. Morrant Baker's case of Paget's disease mentioned by Mr. Bowlby in his paper. For six days nothing occurred, then a puriform discharge containing epithelial cells and some of these coccidia or coccidia-like structures. The discharge ceased for a time, but reappeared after four days, again disappeared and reappeared four days later, and then the rat got quite well again. Since then he had reinjected it with coccidia from a rabbit's liver, and again produced the puriform discharge. This was the only instance in which he had obtained any result whatever from inoculation with cancerous material of any sort, though he had made a large number of experiments.

Dr. Thin traced the history of our knowledge of this disease from Sir James Paget's original paper, in which he had shown that there was some connection between an inflammatory condition of the nipple with subsequent tumor formation in the breast. His own paper which Mr. Bowlby had referred to followed next, and shortly afterwards Mr. Butlin's paper, in which he described the inflammatory process as passing down the ducts to the tumor. In this paper Mr. Butlin called the disease of the nipple "eczema." Not long afterwards Dr. Thin read a paper to show that the nipple disease was something totally different from eczema, and he thought it a pity that the term eczema should still be retained for this condition. He had recently examined a case of this disease for coccidia unsuccessfully, but he had found an immense number of these bodies in some of his old preparations. He thought, however, that they were nothing else than epithelial cells in various stages of degeneration, and he had seen exactly similar appearances in epithelial cells from a cancer of the lip, and these appearances had been published in his paper in the *British Medical Journal* in 1881. The peculiar disease caused by the secretion preceded the tumor formation, and was no known skin disease.

Mr. Jonathan Hutchinson, Jr., in reply, said that the great difficulty was to determine whether the bodies seen were coccidia or altered epithelium cells. He suggested that scrapings should be taken from a future case, and watched upon a warm stage under the microscope to see if there were any signs of movement in these bodies, as, if so, it would go far to show that they really were coccidia. The fact that those in the scrapings from nipples did not take Neelsen's stain might be due to the fact that they belonged to a different species, of which many were known to exist.—*British Med. Jour.*

THE DIFFERENTIAL DIAGNOSIS AND PROGNOSIS OF TINNIUS AURIUM (NOISES IN THE HEAD AND EARS).—*Class 1.*—Impulses originating in the temporal lobe, or superior temporal gyrus, the cerebellum, or the auditory nuclei (in the medulla or pons), and referred as impressions to various situations, as the labyrinth or certain parts of the head. Such acoustic impressions may or may not be attended by deafness. These impulses may be associated with lesions in these areas—as tumors, apoplexies, effusions, thrombi, or possibly lesions in the adjacent portions of the occipital

or parietal lobes. Such impulses may result also from reflected irritations of any of these parts.

Class 2.—Impulses due to irritation direct or reflected in any portion of the auditory nerve. This latter would include hyperæsthesia, atrophy, sclerosis, traumatism, vaso-motor (dilator or constrictor) effects, morbid blood-supply to the nerve, as in uræmia, anæmia, or the circulatory changes which occur during pregnancy. These latter causes may also operate under Class 1.

Class 3.—Impulses originating in the peripheral ends of the auditory nerve, due to: (*a*) Increase or diminution of labyrinthine pressure, increase or diminution of, or encroachment upon, the perilymph or endolymph from abnormal pressure on either of the fenestræ. This latter cause would include rigidity of the membrane of the round opening and fixation of the stapes against the oval opening. (*b*) Vascular changes—increase or diminution of blood-pressure, frequently associated with cardiac disease—hyperæmic, anæmic, or toxæmic states of the blood circulating in the labyrinth; apoplexy and extravasations. (*c*) Morbid nerve conditions—hyperæsthesia, paresis (organic or functional), atrophy, sclerosis, traumatisms. (*d*) Rheumatic, gouty, or syphilitic states of the walls and vessels of the labyrinth. (*e*) Reflected disturbance through the spinal cord or cerebro-spinal nerves, as occurs in uterine disorders, pregnancy, gastric derangements, gout, disorders of the liver, flatulence, spinal neuroses, dental, nasal, and ocular irritations involving the fifth and facial nerves.

Class 4.—Irritations arising from interferences with the intra-tympanic muscles—tensor tympani and stapedius. Such interferences would include any spasm of these muscles—abnormal changes in the membrana tympani or the mucous membrane of tympanum—reflex irritation transmitted from the facial or trigeminal nerves.

Class 5.—Irritations transmitted by altered conditions of equilibration of the air in the tympanic cavity. This would include enervation of the tubal muscles of the Eustachian tube, and altered relations between the air in the tympanic cavity and the blood in its vessels or those of its membrane; also pathological states of the membrane.

Class 6.—Irritations due to disease in the middle ear and labyrinth. This would embrace atheromatous changes in the arteries, aneurysmal dilatations, blood extravasations, venous congestion within the lateral sinuses, disease of the mastoid cells, and disease of the petrous portion of the temporal bone, exudations and tumors.

Class 7.—Irritations arising in the external ear, including inflammation and abscess, ceruminous collections, eczematous inflammation, exostosis and hyperostosis, othæmatoma, foreign bodies. Some of these causes act by direct irritation of the nerves supplying the external auditory meatus or tympanic membrane, as in inflammatory attacks and exostosis, others, as cerumen or foreign bodies, by the influence they exert on the sound waves, or by the pressure due to their presence on the membrana tympani, and thus conveyed to the ossicles and labyrinth.

Class 8.—True aural hallucinations—subjective impressions arising in the psycho-sensorial brain centers and having no objective cerebral or aural source of origin. Such hallucinations may become insane hallucinations. The latter may be divided into two distinct forms. (*a*) Hallucinations which arise subjectively in the brain when the aural appa ratus and auditory nerves are healthy. (*b*) Hallucinations which are secondary to objective changes in the aural apparatus and in which a tinnitus is developed that leads up gradually to a fixed illusion.

Class 9.—Therapeutical causes of tinnitus aurium. The action of such drugs as ergot, nitro-glycerine, alcohol, ether, quinine, salicine, caffeine, apomorphine, nitrite of amyl, tobacco, iodine, iodoform, chloride of barium, digitalis, convallaria, atropin, veratrin, duboisin, gelsemin, jaborandi, pilocarpine, monobromide of camphor, hydrobromic acid. Some of these drugs may act by direct stimulation of the auditory nuclei in the medulla, as caffeine, gelsemin, iodoform, salicine, and quinine; others, as digitalis, jaborandi, nitrite of amyl, chloral hydrate, by their action on the vaso-motor center; others, as quinine and digitalis, convallaria, by their secondary effects on the auditory circulation through their action on the heart.

I desire to supplement this classification by adding a few observations on a differential diagnosis on the lines above laid down. It is difficult in many cases to do this accurately and with confidence, but in a very large number of patients we can come sufficiently near the reference of the individual case before us to a special class, or it may be the borderland of two distinct classes of tinnitus, to enable us to give a correct prognosis of the chances for or against recovery, and to indicate the correct line of treatment to be pursued. To return to the etiological classification I have tentatively laid down, we may summarize the clinical evidence on which, after a careful examination, we are enabled to include a particular case under any of these heads.

Class 1.—Most of those who would come under this class are likely to have some evidence of the implication of the other nerves of sense in reflex disturbances, in muscular paresis, cutaneous anæsthesia or hyperæsthesia, or in oculomotor symptoms and pupillary changes. Such causes as apoplexies, effusions, thrombi, or cerebral lesions, acting by inhibition, are most likely to reveal themselves in objective signs in the parts in correspondence or associated with these cerebral centers. It is probable that in such reflected excitations we have an explanation of a tinnitus without deafness, as in cases of dental caries, dental periostitis with neuralgia, spinal tabes, uterine disorders, as versions and flexions, and in the functional sexual disorders of the menopause or pregnancy (though in the latter it is more often to be attributed to arterial tension and hæmic changes).

Class 2.—We may expect to find similar symptoms to those referred to in Class 1, with more direct evidence of a lesion or excitation in the auditory nerve itself. In hyperæsthesia, the hyper sensitiveness and pain attendant upon certain sounds, though there may be normal acuteness of hearing; in traumatism, the history of some injury, as a blow on the ear, a railway collision, a nasal fracture; in sclerosis and atrophy, the absolute deafness and the negative response to the watch or tuning fork, even by conduction, added to the history of pre-existing aural symptoms and progressive deafness or possibly vertigo; in irritation of the vaso-motor center, vaso-motor disturbances of the labyrinth due to reflected excitations arising in the spinal cord or in the nuclei or branches of the fifth nerve, with all such evidences as spinal neurosis, spinal and ganglionic irritation, oculo-motor symptoms, visual disturbances, gastric crises, headache, possibly thyroid changes, flushing of the face, dental neuralgia and associated dental affections, as in eruption of the wisdom teeth, eruption of ocular and laryngeal migraine.

Urine of low specific gravity, with a radial pulse of high tension, albuminous or that charged with excess of uric acid, the characteristic uræmic complications with the associated altered blood of pregnancy, require only to be remembered as coming under this class to secure their detection on examination.

In Class 3 we confront more clearly local causes of the tinnitus. Such peripheral auditory nerve excitations are usually associated with some abnormal states of the middle ear or the membrana tympani. These, in a case of diminution of labyrinthine pressure from changes in the perilymph or endolymph, with accompanying rigidity of the round membrane or fixation of the stapes, have, most frequently as their consequences, tinnitus, deafness with vertigo, and often nausea. The ossicula frequently are involved, the joints are ankylosed, the membrane is fixed, its pockets are altered in shape; the malleus is sharply defined, or if the case be an old one its head alone is visible, the normal division of the membrane into pockets is absent, the pyramid of the light is either blurred or imperceptible, and the membrane may have lost its translucent look. But at other times this is not so, and though there is clear evidence from the tuning fork, watch, and acoumeter that the auditory nerve is affected, the membrane preserves its translucency, and there is but little deviation from the natural appearances. Then there are the cases in which the hearing distance is normal or a fair degree of hearing is preserved, and still we have tinnitus, and possibly vertigo superadded. There may or may not be local evidences of gross middle ear changes. We at once suspect vascular tension, increase or diminution of blood pressure, and we search for evidence of organic cardiac changes or altered states of the circulatory fluid in anæmic or hyperæmic conditions. This suspicion may be verified by the discovery of a feeble systole, the presence of a cardiac murmur, or valvular disease. The urine requires to be carefully tested, and such toxic states as are likely to influence vascular tension may be detected. Such toxic or hæmic sources of tinnitus are frequently the forerunners of deafness, and the occurrence of Ménière's symptoms, following on extravasations and apoplexies. Aural vertigo rarely occurs without the associated "noise in the ears." The first attack may occur suddenly and without previous warning, but generally there has been some pre-existing tinnitus with impairment of hearing.

Class 3.—Peripheral lesions in the labyrinth are often attended with loud noises, and not infrequently the patient will describe two or three different kinds of noises, one of which is a musical tone or note. But we look in vain in these cases, as distinguished from those in Classes 1 and 2, for any evidence of serious cerebral complications or such causes as uræmia, anæmia, or pregnancy. Gout and rheumatism occasionally my cause tinnitus; but this symptom is associated with evidence of gouty changes in the meatus or on the membrane, and the uric-acid diathesis is manifested by the evidences of gout elsewhere in the body, and the presence of free uric acid in the urine. A pasty meatus, shedding of epithelium, and possibly a slight discharge, are often seen in such gouty cases. Also, we may find on inspection that some cretaceous deposits have occurred, which are seen as irregular white coatings on the membrane. Such cretaceous masses I have frequently observed in gouty patients. I must say that in my experience I have rarely found tinnitus and deafness arising from changes in the middle ear as a result of acquired syphilis. This is not so true in the case of the labyrinth. If they are caused by specific disease there are other signs of syphilis present, most probably in the skin or palate and pharynx, or the nose, and there is the history of a past syphilitic attack. Mere reflected disturbances of the labyrinth, which arise in uterine disorders, during pregnancy, in various forms of dyspepsia, hepatic congestion, flatulent distension of the bowel, or in various visceral neuroses, obviously form but one of the groups of symptoms which are met with in such conditions. More particularly has it to be remembered that tinnitus has its possible origin in dental irritation, in astigmatism and associated asthenopia, in nasal turbinate abnormalities, since such starting points of excitation are specially apt to be overlooked. This remark applies more particularly to the nose. In every case of tinnitus the septum and turbinate bones have to be carefully explored. In many instances it will furnish an explanation of the aural condition.

Class 4.—Here we realize a source of tinnitus which has its direct origin rather in a muscle than in a nerve. Obviously any abnormal action of the tensor tympani or stapedius, causing increase or diminution of pressure and alteration in the equilibration of the labyrinthine fluid, may start a tinnitus. Remembering this, we must not omit to seek for the starting point of the mischief in some direct or reflected irritation in the facial or fifth nerve. It is not necessary in such cases that we should find any indication of an affection of the middle ear or the labyrinth. Thus the hearing may be but slightly affected, or, on the other hand, the influence on the muscles may be caused by gradual changes in the mucous membrane of the tympanic cavity and the ossicular ligaments, with accompanying changes in the mobility, position, shape, and consistency of the membrane. If these latter are present they will be visible with the speculum.

Class 5.—In this class we find the commonest causes of tinnitus, both with and without deafness. Both in this and in the last group we may have, in the tympanic membrane, in displacement and obliteration of its segments, rigidity and immobility, or in varying degrees of collapse (the consequences of chronic catarrhal attacks), evidence of gross changes in the middle ear, which are associated with ankyloses of the ossicles and fixation of the stapes. The patient will often complain of inability to join in general conversation in society, may hear better in a railway train, or omnibus (Paracousis Willisii) and cannot synchronously distinguish two distinct tones, as, for instance, the ticking of two clocks in the same room. On watching the membrane when Valsalva's method is practised, it may not in the least, or but very slightly, yield on inflation. The cone of light is but little altered, or we may detect but the slightest movement of either pocket with Siegle's speculum. On the other hand, the membrane may appear thinner than normal, the malleus may be together displaced, so as to give the appearance of one large pocket which is blown bladder-like out on inflation. But it by no means follows that such pathological signs must be present, even though there be considerable impediment in the Eustachian tube from imprisoned secretion, collapsed walls, stenosis, or obstruction from other cause. Slight deviation from the normal position and transluency of the membrane may be detected, but it is only on listening with the otoscope (auscultation tube) to the inflation of the tympanum, and by careful observation of the membrane through Siegle's speculum, that we are enabled to discover obstruction or collapse of the Eustachian tube. Ex-

amination of the nose and throat may give the clue to the interference with the tympanic ventilation. In the nose, spurs or deviation of the septum, enlarged turbinates, hypertrophic mucous membrane, polypus, rhinolith (both the latter rarely); in the throat, relaxed and feeble palatal muscles, congestion of the palato-pharyngeal mucous membrane (with probably elongated uvula), tonsillar hypertrophy, adenoid growths, are among the more frequently occurring and accompanying conditions which explain the Eustachian interferences, and account for the altered relations of the air in the tympanum to the blood in its vessels, as well as the pathological conditions of the vessels themselves.

Class 6.—I have included under this head those more serious middle ear complications which follow upon disease of the arterial tissues—local apoplexies, extravasations of blood, lymph exudations, congestion of the venous sinuses, arising from pressure or in cardiac diseases. To it also we refer those noises arising from obstructed pulmonic circulation and deficient oxygenation. There are those more serious inflammations of the mastoid and petrous portions of the temporal bone, which lead to both exudations and suppuration. The recognition of such states is not generally difficult. A careful examination of the tympanum with the speculum, showing possibly intra-tympanic growths, granulations, or polypi, and the presence of a fetid discharge will at once arouse suspicion of a deeper-seated cause for the pain, giddiness, or tinnitus, than that recognizable with the speculum. Pain, tenderness and fullness over the mastoid, with projection of the auricle, will generally be present when there is threatening of mastoid abscess; pain more violent and diffused over the head, possibly pupillary changes, optic neuritis, tendency to delirium and secondary lung complications, if the disease has extended deeper and has involved the petrous portion of the temporal bone, or has possibly implicated the lateral sinews.

Class 7.—The causes of tinnitus included in Class 7 are easily discovered, and hence the greater need for their being the first sought for and not overlooked. It may not be amiss to say a few words on each of these outer ear sources of tinnitus. Inflammation and abscess are easily recognized by the local symptoms of pain, severe heat, throbbing, swelling, and occlusion of the meatus, tinnitus and deafness. Such inflammation and abscess may lead to inflammation of the membrana tympani and perforation of it. These acute perforations are frequently attended by severe pain and loud tinnitus. They may occasionally be seen, if viewed through the speculum, to pulsate. Dead débris of purulent collections, epithelium, or cerumen, is apt to be left behind and cause chronic irritation in the ear passage, and may possibly lead to the occurrence of aspergillus or perforation of the membrane. A persistent tinnitus may be the consequence, which a little local attention will remove. Eczema of the meatus, especially of the gouty type, which is started by irritation of its walls, may be the sole cause of the tinnitus, and is frequently incurred by the entanglement of the desquamated particles of cuticle in cerumen and discharge which clog the lumen of the meatus and impinge on the membrane. Both exostosis and hyperostosis may set up a tinnitus by the irritation they cause. But it is rare to find these as a sole cause of tinnitus, and they are frequently present without it. More often we can trace the occurrence of the noise to associated middle ear catarrhal conditions, a gouty diathesis, or some Eustachian obstruction. In gouty patients there is at times a distinct neurotic exaggeration of symptoms, which includes a dwelling on, and morbid apprehension of, any tinnitus that may be present. Over-indulgence in alcoholic drink, and, possibly, excess of tobacco smoking, contribute to increase the loudness and intensification of such noises. It is necessary to refer to othæmatoma (insane ear) as a cause of tinnitus, inasmuch as its etiology and pathology demand separate treatment.

Class 8.—Of the therapeutical sources of tinnitus, the only one I propose to delay over is quinine. That a temporary tinnitus, deafness, and giddiness follow on the prolonged use, or larger doses, of quinine is well known. At times this amounts to that condition known as "quinine intoxication." Burnet insists, and with this view I quite agree, that in most of the cases in which any permanent effects have been noticed as following the use of quinine, there have been other causes present quite sufficient to account for the tinnitus or deafness independent of the quinine. Still, the fact that quinine can produce aural disturbances of function, and that many of those who have taken quinine in large quantities complain of tinnitus and deafness, added to the possibility of its producing a congestive state of the vessels of the labyrinth, independently of its irritating effect on the hearing center, is sufficient to point to quinine as a probable and predisposing cause of tinnitus.

Prognosis.—It has to be confessed that in the present state of our knowledge it is difficult, in defining the grounds on which we arrive at a prognosis in cases of tinnitus aurium, to follow the lines of the classification that has been suggested. Yet that attempt at a differentiation of the causes of tinnitus may be of use in confining the proposed therapeutical steps to certain clinical and pathological conditions which may justify us in hoping for relief, if not cure following on their treatment.

1. We may, in the first place, fairly exclude from the category of curable cases those noises which attend on cerebral tumors, lesions, apoplexies, and degenerations which are secondary to the occurrence of thrombi. It is, however, conceivable that certain cerebral effusions may yield to time and such special remedies, as, for instance, iodide of potassium and mercury.

2. Atrophy, sclerosis, and traumatic lesions of the auditory nerves.

3. Rigidity of the membrane of the round opening, and fixation of the stapes against the oval opening.

4. Extravasations inthe labyrinth.

5. Organized effusions in the labyrinth.

6. Traumatism of the labyrinth.

7. Rheumatic, gouty, and syphilitic degeneration of the walls and vessels of the labyrinth.

8. Organic changes in the periphery of the auditory nerve.

9. Certain chronic and irremediable conditions of the intra tympanic muscles, leading to atrophy, rigidity, or spastic contractions.

10. Many cases of chronic catarrhal inflammation, with corresponding and evident changes in the tympanum, in which a considerable degree of deafness attends on the tinnitus, and in which there is a history of progressive deafness extending over a considerable time, with possibly hereditary deafness in the patient's family.

11. Permanent closure, on occlusion of the Eustachian tube, may be included under this head.

12. Many cases of chronic Ménière's affection (true labyrinthine vertigo) in which, after the more acute

symptoms have subsided, there still persists deafness, occasional attacks of migraine and tinnitus.

13. Tinnitus consequent upon aneurysmal conditions of the auditory arteries on atheromatous changes in their tissues.

14. Exudations and tumors of the mastoid cells—say, of a syphilitic and gummatous nature,—or disease of the petrous portion of the temporal bone consequent upon chronic suppurative catarrh of the tympanum.

15. Distinct aural hallucinations attendant upon or following gross changes in the middle ear and labyrinth.

Turning now to those cases in which we may hope for amelioration, if not complete cure of the tinnitus, we may thus classify them :

1. Tinnitus arising out of any reflected local or systemic irritations of the auditory center or auditory nerve, which are due to deficient morbid blood-supply, or vaso-motor disturbances in the auditory areas.

2. Tinnitus arising out of simple primary hyperæmia of the labyrinth or a hyperæmia which is secondary to certain fevers as intermittent fever, puerperal sepsis, so-called "cerebral" fever, and the continued fevers.

3. Tinnitus consequent upon temporary alterations of the labyrinthine equilibration, whether due to altered conditions of tension of the fenestræ or increase or diminution of blood pressure, and frequently associated with cardiac functional disorders; simple hyperæsthesia acoustica.

4. Tinnitus which has its origin in rheumatic, gouty, and syphilitic conditions, whether in the labyrinth or middle ear; in the uræmia of pregnancy or Bright's disease.

5. Tinnitus due to abnormal states of the intratympanic muscles, as enervation, spasms, altered muscular tension (from defective middle ear ventilation and equilibration), producing conditions and positions of the membrana tympani and accompaning deviations in the normal relations of the ossicles, which have their consequent effects on the labyrinth through the fenestræ.

6. Tinnitus arising out of enervation of the tubal muscles of the Eustachian tube, collapse and closure of the walls of the tubes, temporary obstruction of the tubes from catarrhal conditions of the mucous membrane, or accumulation of mucus in the tube.

7. Tinnitus arising from irritations in the external ear.

8. Tinnitus arising from therapeutical causes.

9. Aural hallucinations which occur independently of any acoustic or cerebral trouble, and which may be associated with visceral or pelvic neuroses. Such hallucinations, if they become insane hallucinations, dissappear with the mental alienation.

—Macnaughton Jones, in *The Lancet.*

WHEN TO STIMULATE.—Perhaps no better rules based on the condition of the heart can be formulated for the administration of stimulants than those which Stokes has laid down for our guidance. The following, according to him, are the physical signs which seem to indicate the early use of stimulants :

1. Early subsidence of the first sound, observed over the left ventricle.

2. Diminution of the first sound over the right ventricle.

3. The heart acting with a single, and that the second, sound.

4. Both sounds being audible, but their relative intensity being changed, so as to represent the action of the heart of a fœtus *in utero.*

5. With these signs, progressive diminution of impulse, which occasionally becomes imperceptible, even when the patient lies on the left side.

—*Therap. Gaz.*

Medical News and Miscellany.

THERE is a grate future for the nutmeg.

SMALL-POX has disappeared from Philadelphia.

ECZEMA is said to be frequently caused by the use of ivory soap.

DR. FOTHERGILL termed the poor, "bridges to the pockets of the rich."

A PUPIL at the Philadelphia Lying-in Charity fell down the elevator shaft and was killed.

ALL the Java sparrows imported into Maine have died. English sparrows won't stay in Maine.

THE Illinois Training School for Nurses has made arrangements to supply the County Hospital with nurses.

DOCTORS are by right entitled to a holiday of fifty-two days each year, as they know no Sunday in their vocabulary.

A JAPANESE physician recommends that vaccination be performed by injecting the virus under the skin with the hypodermic syringe.

THE tricky nerves, when under-fed or over-worked, or out of discipline, billet themselves upon some maimed organ and hold high revel there.

NITRO-GLYCERINE, ten drops of a $\frac{1}{100}$ solution, has been administered hypodermically in the complete asphyxia of drowning, with marvellous results.

SINCE perusing the latest number of the *Medical Record*, we feel warranted in stating that Dr. Shrady has returned home from his vacation improved in health.

EQUAL parts castor oil and subnitrate of bismuth make an excellent application to fissured nipples. It is not absolutely necessary to wash off before letting the child nurse.

NEVER put paper on the walls of a nursery. It is better to either paint or kalsomine. There is always danger of poison in the coloring of the paper, or of the paste becoming sour.

IT is a curious fact that mayonnaise dressing will disagree with delicate people, whereas the same ingredients put together without an egg (French dressing) will be easily digested.

WIGGINS, the weather prophet, has written a scientific novel describing life on Jupiter and predicting what the people of this earth will be like morally and politically 20,000,000 years from now.

RUSSIAN emigrants have infested Bremen with the Egyptian eye disease. It is estimated that 5,000 persons are suffering from the complaint. It has been necessary to close all the schools.

In families where there is much sewing to be done, it is a good plan to have the bulk of work on dark and colored goods done by daylight, preserving the white sewing for the evening, in order to save the eyes.

The newly-elected Professor of Therapeutics at Jefferson Medical College, Hobart A. Hare, has, we are credibly informed, concluded that the duties of his chair will not allow him time to edit the *Medical News*, and has resigned the journal. Wise man.

How many journal readers are aware of the fact that the article now going the rounds of the medical press entitled "Too Much Surgery," is simply an advertisement for a proprietary nostrum?

Also, how many journals are giving it circulation without pay.

Venereal diseases are said to be almost unknown among the laboring men of Paris. Out of 3,240 men in the prime of life, Dr. Fiaux found but five suffering from gonorrhœa and chancroid, and not one from syphilis. These men were applicants for work on a railroad.

Shot should never be used to clean bottles intended to contain food, drink, or medicine. Lead-poisoning has been traced to this cause. It is said that a good way to clean bottles is to fill them with finely-chopped potatoe skins, cork tightly, and let stand three days in a warm place, until fermentation occurs.

Peroxide of hydrogen has been used to sterilize milk. When mixed in the proportion of five or six tablespoonfuls to the quart of milk, the milk will not curdle or become sour for forty-eight hours at the summer temperature. The cream from such milk is so sweet that butter cannot be made from it for a considerable time.

Private dispatches received in Berlin say cholera is raging in German New Guinea, an attack invariably resulting in death within from fifteen to twenty hours. All who are left alive are compelled to assist in digging graves for the dead. The governor of the colony, his wife, and Dr. Wieland were among the earliest victims.

Some London genius has invented a nose machine to reduce the varied deformities of the nasal appendage. This marks a new era in civilization, and has doubtless deeper signification than would appear at first thought. If Cleopatra's nose had been half an inch shorter the history of the world would have been entirely different.

The eyes of travelers and pleasure-seekers who are weary of the beaten paths are just now turned towards Alaska, which is said to possess some of the most marvelous scenery in the world. An article describing a trip to Alaska, and the beauties of its mountains and valleys is contributed by Grace Peckham, M.D., to *Lippincott's* for June.

"I am satisfied," said the dentist, "that infinitesimal currents of electricity are set up in the mouth between the saliva and many kinds of food, especially those containing a large proportion of carbon; for instance, toast. I think, too, that the same currents are produced when teeth fillings of different metals occur in the same person's mouth; furthermore, I believe that the acute relish which we experience when eating certain combinations of food is due to the action of these currents of electricity upon the sense of taste."

Viburnum prunifolium is recommended for the relief of troublesome cramps in the calf of the leg occurring so frequently at night. This is an old remedy which has been used in domestic practice from time immemorial. The common name of viburnum opulus is "cramp bark," and its popular reputation for the cure of cramps and spasms used to be great and widespread.

We have received a pamphlet containing information, compiled from various sources, concerning the pilocarpus pennattifolius, and the piper jaborandi. Also, another, giving the latest information and clinical reports of euphorbia pilulifera, and evening primrose, œnothera biennis. Reprinted from the *Pharmacology of the Newer Materia Medica*. They are both worthy of careful perusal.

The Koch Institute.—The introduction of a bill in the Prussian legislature to endow the Koch Institute last week was made the occasion of a legislative debate on the value of the remedy. There seemed to be a feeling that the government had patronized tuberculin with a little too much enthusiasm. Virchow is said to have opposed the grant, which was nevertheless voted, the sum being about $40,000.

Dr. James W. White, well-known in dental circles, dropped dead last Wednesday. Dr. White was a man of strong likes and dislikes, very popular with his friends, and very much detested by his enemies. His abilities were so highly valued by the S. S. White Dental Company that he is said to have received a salary of $10,000 per annum for editing their organ, the *Dental Cosmos*. His work on the Seybert Commission, in investigating the claims of alleged spiritualists, was of the greatest value.

The administrator of anæsthetics at the Samaritan Hospital for Women had the misfortune to have a patient die under his hands last week. The patient was a woman aged thirty two years, who was admitted for the purpose of having an internal tumor removed. An inquest has been held by Dr. Danford Thomas, at which it was stated that the deceased had been inhaling chloroform, administered in the usual manner, only three minutes, when she suddenly became pale, and died of syncope. She was said to be extremely weak, and also to have a fatty heart. The verdict returned was "death from misadventure."—*Hosp. Gaz.*

Lettuce as a Carrier of Disease.—The *Maryland Medical Journal* has it from the authority of a farm-hand who "has been there" that the market gardeners about Baltimore (and other cities we doubt not), in their eagerness to be first in the market, dilute the human feces from the cess-pool with water, and by the aid of a watering-pot sprinkle it daily upon their lettuces and cabbages. The plants, grown large, and more or less saturated with fecal matters, are then served as an appetizing luxury upon our tables, having first undergone such a cleansing as the cook thinks necessary. This cleansing for the most part consists in a hasty washing of the plants with *cold* water. In view of the fact that lettuce is eaten raw, and of the assertion made by scientific men that poisonous matters are taken by such herbs directly and unchanged into their tissues from the soil about them, it would be well for those who are interested in the public health to consider the methods by which the marketman fertilizes his garden and forces his early vegetables.

PRESENTATION DAY at the University of London on Wednesday last was shorn of some of its wonted glory through the absence of the newly-appointed chancellor, the Earl of Derby, who is down with influenza. The chair was taken by the vice-chancellor, Sir James Paget, who, it is needless to say, discharged the duties in a most able manner. Women graduates were in strong force, no fewer than fifty-three taking the "M.A." degree, eight took the "B.Sc.," and eight the "M.B." Miss A. F. Piercy had the distinguished honor of carrying off the exhibition and medal in materia medica and pharmaceutical chemistry.—*Ex.*

CURRIER relates a case recently under his care. A young lady, nineteen years of age, applied to him for relief from cystitis. He sounded the bladder and thought he detected evidences of stone. He then opened the bladder through the vagina, and, on introducing his finger, withdrew a hair-pin. The girl denied all knowledge of how it came there.

She was not as confiding as a Texas girl was to us many years ago. We removed a cologne bottle from her vagina. She informed us she "accidentally swallowed it when a child, and was afraid to let it be known, as her parents might make her have it cut out." Of course we believed her.

—*Country Doctor.*

A LOCAL ANÆSTHETIC.—Much is said about local anæsthetics. Patented nostrums and private formulæ are being hawked about the country, and sold from five to twenty-five dollars to dentists. Permit me to suggest a preparation that I think will come as near "filling the bill" as any they have tried, as to cost, safety, and effectiveness. It is a 5 per cent. solution of carbolic acid in water. Four or five drops injected under the gum each side of the tooth to be extracted, in most cases, is effective. Swelling and inflammation around the teeth causes its action to be the more noticeable and satisfactory. Its effect is almost instantaneous. As one has to use twenty drops of this solution to get one drop of carbolic acid, I need not caution intelligent dentists against constitutional symptoms arising from a too free use of this agent, as it will not be necessary to use enough to produce such results.—*Items of Interest.*

AN INTERNATIONAL MEDICAL CONGRESS.—The managers of the National Prohibition Park, of Staten Island, invite representative medical men from all localities in the United States and the Dominion of Canada to meet in conference on the 15th and 16th of July next, in the great Auditorium Building of the Park. The chief object of the meeting is to be the comparison of views on the relationship of physiology and alcohol. Among the questions to be discussed will be the following:

What are the Hereditary Effects of Drunkenness?

Are there any Hereditary Effects that Follow Moderate Drinking?

To What Diseases are Inebriates More Especially Exposed?

Is Alcohol a Poison?

Is Alcohol in Any Sense a Food?

What are the Proper Uses of Alcohol as a Medicine?

Is there Danger of Producing the Drink Habit from the Prescribing of Alcoholic Medicines?

How Large a Percentage of Deaths may be Attributed, Directly or Indirectly, to the Use of Strong Drink?

Should Alcoholic Liquors Ever be Used Except under the Direction of a Medical Adviser?

WEEKLY Report of Interments in Philadelphia, from May 16 to May 23, 1891:

CAUSES OF DEATH.	Adults.	Minors.	CAUSES OF DEATH.	Adults.	Minors.
Alcoholism	2		Fever, intermittent		1
Apoplexy	12	1	" scarlet		8
Asthma	3		" typhoid	12	3
Bright's disease	4		Gangrene, abdominal		1
Cancer	9		Hemorrhage	3	
Casualties	10	1	Hernia	2	
Cerebro-spinal meningitis		2	Inanition		4
Congestion of the brain	2	7	Influenza	6	2
" " lungs	4	2	Inflammation brain	5	15
Child birth	2		" bronchi	7	9
Cholera infantum		7	" kidneys	5	1
Cirrhosis of the liver	1		" heart		1
Consumption of the lungs	56	6	" lungs	21	14
Collapse of lungs		1	" peritoneum	7	
Convulsions		14	" s. & bowels	4	3
" puerperal	2		Intussusception	1	
Croup		2	Laparotomy	1	
Cyanosis		4	Marasmus	1	10
Debility	2		Measles		2
Diarrhœa	1	4	Neuralgia, heart	1	
Diphtheria		17	Obstruction of the bowels		1
Disease of the brain	1		Old age	20	
" " heart	21	3	Paralysis	6	
" " kidneys	2		Rheumatism	1	3
" " liver	1		Scrofula		1
Drowned	4	1	Septicæmia	4	2
Dropsy		2	Suicide	1	1
Effusion of the brain	1		Teething		1
Epilepsy	3		Tumor	3	
Erysipelas	1		Uræmia	5	
Enlargement of the heart	1		Whooping cough		3
Embolism, cerebral	1				
" cardiac	1		Total	263	160

ETHER DRINKING IN IRELAND.—It has been affirmed that in Draperstown district, County Derry, out of a population of 9,500, there are 6,200 ether-drinkers, and that persons of all classes, the clergy, the gentry, ladies, and the working-classes, are victims addicted to the vice. This statement and others similar in character, relating to the practice of drinking ether in various portions of the north of Ireland are, however, grossly exaggerated, and, although a good deal of ether-drinking takes place, it is very trifling in comparison to what has been alleged. Ether-drinking causes irritation of the stomach and a liability to gastric ulcer. The ether used is a vile compound, being made from methylated spirit, and costs about two shillings a pint. Ether-drinkers appear to select ether instead of whisky because it is so very much cheaper and they can become intoxicated sooner, while the stage of inebriety is very much shortened.

SKIN GRAFTING BY MACHINERY.—On a recent March morning, at the Massachusetts General Hospital, a little instrument, invented by Dr. Mixter, wonderful in its simplicity, constructed so as to separate large portions of epidermis from the subcutaneous tissue, was used for the first time.

The patient had been etherized, and had undergone operation for the removal of a cancerous growth from the left breast, and the wound thus made was quite an extensive one. The instrument was applied to the anterior portion of the right thigh, and three strips, about an inch wide by six inches long, were taken off and transplanted to the exposed surface of the breast. The operation of removing the skin and transplanting it to its new quarters did not occupy more than about six minutes. A very few days will suffice to restore the denuded surface of the thigh to its normal condition, leaving few traces of the reparative process to which it has contributed, and, other things being equal, the surface from which the cancerous tumor has been excised will heal over by first intention, thus saving the patient from a prolonged and painful period of convalescence. Of course, every precaution is taken by the use of sterilizing

processes and antiseptic solutions, to render the operation thoroughly aseptic, so that the chances of inflammatory disturbances from bacterial sources are reduced to the lowest minimum.

The thickness of these delicate human plasters probably does not exceed one-sixtieth of an inch, and the resulting hemorrhage is not more than what one sees on a slight abrasion of the skin; or, it may be compared to the sanguineous oozing one gets from too earnest tonsorial attention.

The advantage of the new over the old method of epidermic detachment is obvious. It is expeditious, the sections of shaved cuticle are much larger and of a more uniform thickness than can be obtained by the most dexterous manipulator, and the chances of successful grafting are enhanced by the fact that the skin is transplanted while the cellular elements are in their full vital activity.

DR. SHORTHOUSE has been diagnosing the effect of various intoxicating liquors on different parts of the cerebellum when imbibed not "wisely but too well," and the tendency of the result of his investigations is to indicate that inebriety can be reduced to an exact science so far as its subsequent demonstrations are concerned. Dr. Shorthouse finds that good wine and beer indiscreetly imbibed have the effect of making a man fall on his side; whisky, and especially Irish whisky, on his face, and cider and perry on his back—these disturbances of equilibrium corresponding exactly with those caused by injury to the lateral lobes and to the anterior and posterior parts of the middle lobe of the cerebellum respectively. Should the soundness of Dr. Shorthouse's theories be established, the future labors of the statistician and the scientist in determining the popular use and abuse of spirituous liquors will be materially lessened by the testimony of the city policeman.

NOTWITHSTANDING the advent of summer weather, the influenza is steadily spreading throughout the country and sadly increasing the bills of mortality. In many towns in the North of England, where the epidemic is prevailing, the death-rate has increased to double the average numbers. A noteworthy feature of the disease is its impartiality, attacking indiscriminately the rich and the poor, the just and the unjust. The latest to be attacked is H.R.H. the Prince of Wales, who, let us hope, will not suffer seriously. Mr. Gladstone is also suffering from a mild attack, and several other M.P.'s are unable to attend to their parliamentary duties in consequence of the disease. Through the epidemic our metropolitan hospitals are very much crowded, so that many necessitous cases are refused admission. At an inquest held by Dr. Danford Thomas a few days ago, on the body of a man who had died from rupture of a blood-vessel, it was stated that he was taken to three hospitals, viz., The Royal Free, St. Bartholomew's, and University College, before he could be accommodated with a bed.—*Hosp. Gaz.*

AT the meeting of the Board of Trustees of the University of Pennsylvania, held May 21, Dr. Pepper made an offer of $50,000 towards an endowment fund of $250,000, and of $1,000 annually towards a guarantee fund of $20,000 annually, for five years, conditioned upon the establishment of an obligatory graded four-year course of medical study. This was accompanied by a communication from the Medical Faculty, pledging themselves to carry out this proposal, and to enter upon the four-year course in September, 1893. It was also reported that the members of the Medical Faculty had themselves subscribed $10,000 annually for five years to the endowment fund. The Board of Trustees expressed warm approval of the proposed advance in medical education, but postponed their assent until the success of both funds had been demonstrated.

It is claimed that the approaching completion of the fine Laboratory of Hygiene, built by Henry C. Lea, Esq., will render the medical facilities of this school unequaled. It is to be hoped that the necessary pledges will be secured promptly, as the interests of the entire community are deeply involved in the success of this great advance, which will enable medical students to obtain a thorough practical education in every branch of their profession.

Army, Navy & Marine Hospital Service.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from May 19, to May 25, 1891.

Captain Guy L. Edie, Assistant-Surgeon, is relieved from duty at Fort Douglass, Utah Territory, and will report in person to the commanding officer Fort Niobrara, Nebraska, for duty at that post, relieving Major Timothy E. Wilcox, Surgeon. Major Wilcox, on being relieved by Captain Edie, will report in person to the commanding officer Fort Huachuca, Arizona Territory, for duty at that post. Par. 14, S. O. 102, A. G. O., May 5, 1891.

Captain Walter D. McCaw, Assistant-Surgeon, is relieved from duty at Fort McPherson, Ga., and will report in person to the commanding officer Camp Pilot Butte, Wyoming, for duty at that post, relieving Captain George E. Bushnell, Assistant-Surgeon. Captain Bushnell, on being relieved by Captain McCaw, will report in person to the commanding officer Fort McKinney, Wyoming, for duty at that post. Par. 14, S. O. 102, A. G. O., May 5, 1891.

First Lieutenant Joseph P. Clarke, Assistant-Surgeon, is relieved from duty at Fort Riley, Kansas, and will report in person to the commanding officer Camp Poplar River, Montana, for duty at that station, relieving First Lieutenant Jefferson D. Poindexter, Assistant-Surgeon. First Lieutenant Poindexter, on being relieved by Lieutenant Clarke, will report in person to the commanding officer Fort Niobrara, Nebraska, for duty at that post. Par. 14, S. O. 102, A. G. O., May 5, 1891.

By directing of the Secretary, the following assignments of recently appointed medical officers are ordered: First Lieutenant William F. Lippitt, Jr., Assistant-Surgeon, will report in person for duty to the commanding officer Fort McPherson, Ga.; First Lieutenant Benjamin Brooke, Assistant-Surgeon, will report in person to the commanding officer Fort Riley, Kan.; First Lieutenant Merritte W. Ireland, Assistant-Surgeon, will proceed from Columbia City, Ind., to Jefferson Barracks, Mo., and report in person for duty to commanding officer of that post; First Lieutenant George M. Wells, Assistant-Surgeon, will proceed from Paoli, Ind., to Columbus Barracks, Ohio, and report in person for duty to the commanding officer of that post. Par. 83, S. O. 115, A. G. O., May 20, 1891.

Leave of absence for one month to commence on or about May 23d instant, is hereby granted to Captain Marshall W. Wood, Assistant-Surgeon, U. S. Army. Par. 1, S. O. 104, Division of Atlantic, May 20, 1891.

Captain William B. Banister, Assistant-Surgeon, is assigned to duty as Medical Officer with Troop B, Sixth Calvary, while en route from Fort Meyer, Va., to Fort Washakie, Wyo. On arrival of the troops at its destination, Captain Banister will return to his station at Washington Barracks. Par. 3, S. O. 104, Division of Atlantic, May 20, 1891.

By direction of the Secretary of War, Captain George McCreery, Assistant-Surgeon, is relieved from duty at Fort Clark, Texas, and will report in person to the commanding officer, Fort McIntosh, Texas, for duty at that post. Par. 4, S. O. 114, A. G. O., May 19, 1891.

Captain John O. Skinner, Assistant-Surgeon, U. S. Army, Fort Davis, Texas, will proceed at once to Fort Clark, Texas, and report to the commanding officer for temporary duty. Par. 4, S. O. 44, Department of Texas, May 13, 1891.

Notes and Items.

U. S. ARMY MEDICAL EXAMINING BOARD,
Room 54, Army Building, No. 39 Whitehall St.,
New York City, May 15, 1891.

MR. CHARLES MARCHAND,
No. 10 West Fourth St., New York City.

Dear Sir: In reply to your letter of May 14, 1891, I have to state that the samples of Marchand's Peroxide of Hydrogen (medicinal) have been received, and your remarks noted, for both of which I thank you. The Army Medical Examining Board has recommended that your preparation be placed upon the Standard Supply Table of the Medical Department of the Army, and I wish to thank you in their name.

Very respectfully, E. P. VOLLUM,
Col. and Chief Medical Purveyor U. S. A.,
Prest. of the Army Medical Examining Board.

A PLAIN STATEMENT.

HAVERHILL, MASS., March 7, 1891.

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